

A SET OF AS-BUILT PLANS FOR LEGENDS POINTE - PHASE ONE

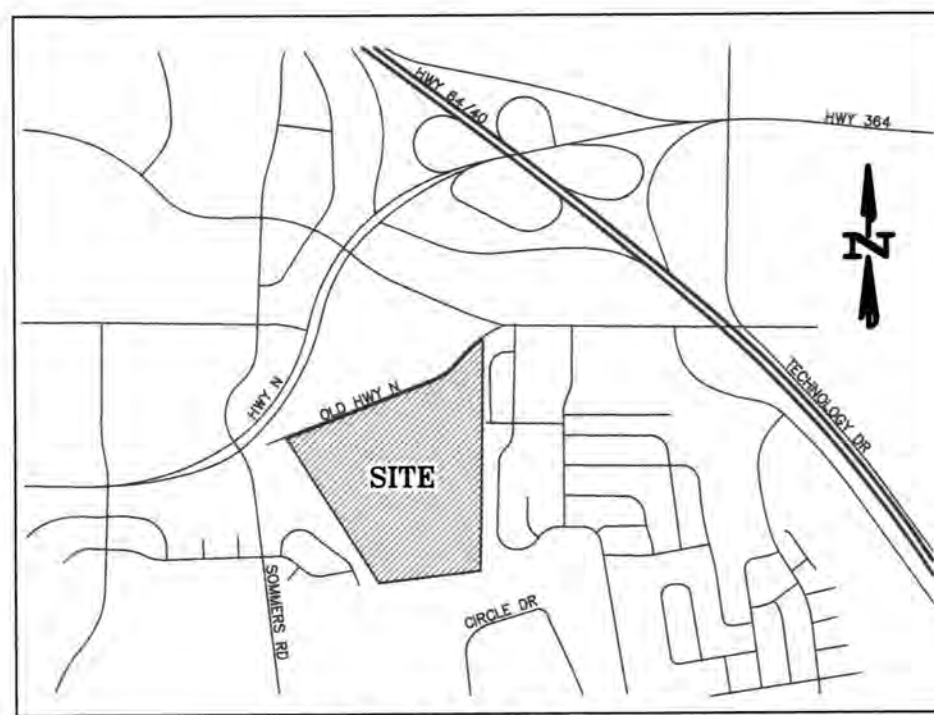
(formerly THE VILLAGES AT RHODES FARM)

A TRACT OF LAND BEING PART OF SECTION 10,
TOWNSHIP 46 NORTH, RANGE 2 EAST
OF THE FIFTH PRINCIPAL MERIDIAN,
CITY OF O'FALLON

ST. CHARLES COUNTY, MISSOURI

Development Notes:

- Total Area of Tract: 45,966 Acres
- Existing Zoning: R-3, PUD & C2 (City of O'Fallon)
- Proposed Uses: Single Family Residential & Commercial Development
- Number of Lots Proposed: 114 Single Family Lots
- Property Owners: Robert M. Rhodes Trust, 33 Mar Len Drive, Defiance, MO 63341
- Per Flood Insurance Rate Map Panel Number 29183C0220G Dated January 20, 2016. Portion of this site is Zoned AE, described as area containing base floodplain elevations. All basement floors proposed to be 2 feet above the 100 year flood plain elevation.
- All streets are to be public and constructed per St. Charles County specifications except as modified by City of O'Fallon.
- Topographic information is per aerial topography by Surdex Corporation on U.S.G.S. Datum.
- Boundary information is per survey as compiled by Box Engineering during June, 2015.
- One tree shall be planted for every lot. Two trees for corner lots.
- All homes shall have a minimum of 2 off-street parking places with 2-car garages.
- The developer shall comply with current Tree Preservation Ordinance Number 1689 and provide landscaping as set forth in Article 23 of the City of O'Fallon Zoning Ordinances.
- Additional lighting may be required by the City of O'Fallon.
- Detention for this development to be provided by the basin within the common ground area. Detention requirements shall be for the 100year/20 minute storm and shall be provided with the initial phase of the development per the City of O'Fallon Design Requirements.
- All existing creeks, streams, and drainage swales will have an associated storm water easement that will be provided on the Record Plat.
- All new utilities will be located underground.
- A ten (10) foot wide general utility easement is required along all public right-of-ways.
- All signage shall be reviewed and approved through a separate permitting process.
- Lots 95-114 are located within the existing floodplain. Lots 95-114 will be removed from the floodplain via a LOMR. The appropriate documentation will be provided following grading and at such time that we can verify all lots have been removed from the floodplain. The Record Plat(s) will be approved for any Lot removed from the Floodplain until a LOMR is received and that all buildings will have the lowest floor (basement) elevation a minimum of two (2) feet above the base flood elevation.



Locator Map

Utility Contacts

Duckett Creek Sanitary District
3550 Highway K
O'Fallon, MO 63368
636-441-1244

Public Water Supply District No. 2
P.O. Box 967
O'Fallon, MO 63366
636-561-3757 Ext. 131

Storm Sewer
City of O'Fallon
100 N. Main St.
O'Fallon, MO 63366
636-281-2858

Cuivre River Electric Co.
P.O. Box 160
Troy, MO 63379-0160
1-800-392-3709

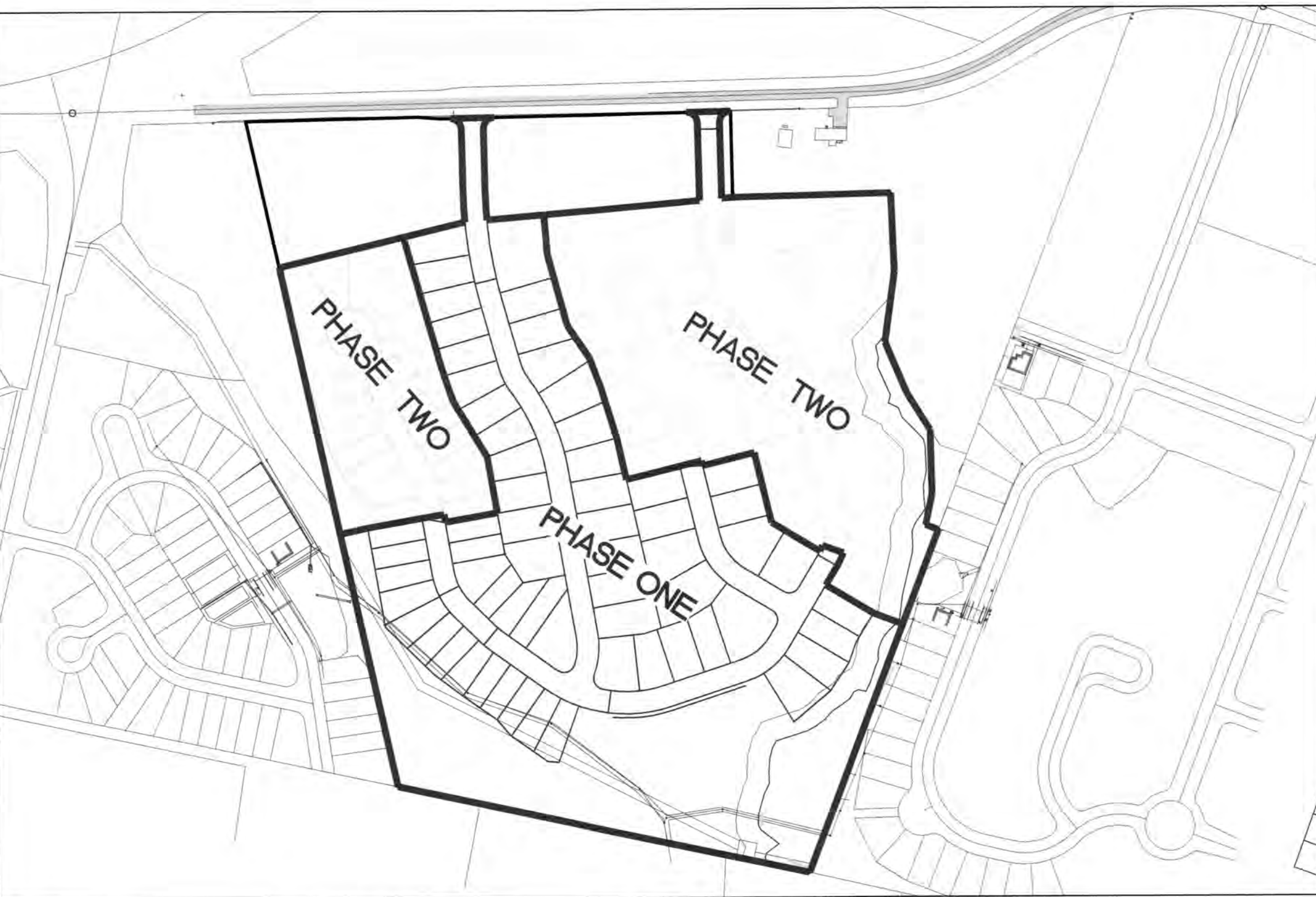
Gas
Laclede Gas Company
6400 Graham Road
St. Louis, MO 63134
314-522-2297

Telephone
Century Link
1151 Century Tel Dr.
Wentzville, MO 63385
636-332-7261

Charter Communications
941 Charter Commons
Town & Country, MO 63017
1-888-438-2427

Wentzville Fire District
209 West Pearce Blvd.
Wentzville, MO 63385
636-332-9869

Wentzville R-IV School District
One Campus Drive
Wentzville, MO 63385
636-327-3800



Legend

Plan View

0000	EXISTING LABELS	EXIST. SINGLE CURB INLET
600.00	PROPOSED LABELS	EXIST. AREA INLET
CI	SINGLE CURB INLET	PROPOSED SINGLE CURB INLET
DCI	DOUBLE CURB INLET	PROPOSED AREA INLET
AI	AREA INLET	PROPOSED GRATE INLET
DAI	DOUBLE AREA INLET	EXIST. SANITARY MANHOLE
GI	GRATE INLET	PROPOSED MANHOLE
DCI	DOUBLE GRATE INLET	EXIST. STORM MANHOLE
MH	MANHOLE	PROPOSED SANITARY MANHOLE
FE	FLARED END SECTION	EXIST. WATER VALVE
EP	END PIPE	PROPOSED WATER VALVE
CP	CONCRETE PIPE	EXIST. GUY WIRE
RCP	REINFORCED CONCRETE PIPE	PROPOSED GUY WIRE
CMP	CORRUGATED METAL PIPE	EXIST. LIGHT STANDARD
CPP	CORRUGATED PLASTIC PIPE	PROPOSED LIGHT STANDARD
PVC	POLY VINYL CHLORIDE (PLASTIC)	EXIST. FIRE HYDRANT
CO	CLEAN OUT	PROPOSED FIRE HYDRANT
.....	GRADING LIMITS	EXIST. WATER METER
---	DRAINAGE SWALE	PROPOSED WATER METER
---	EXISTING STORM SEWER	EXIST. GAS VALVE
---	EXISTING SANITARY SEWER	PROPOSED GAS VALVE
---	EXISTING WATER LINE	EXIST. TELEPHONE PEDESTAL
---	EXISTING FIBER OPTIC LINE	PROPOSED TELEPHONE PEDESTAL
---	GAS	EXIST. TREE
---	EXISTING UNDERGROUND ELECTRIC	PROPOSED TREE
---	EXISTING OVERHEAD ELECTRIC	
---	EXISTING CABLE TV LINE	
---	EXISTING TELEPHONE LINE	
---	PROPOSED STORM SEWER	
---	PROPOSED SANITARY SEWER	
---	FENCE LINE	
---	SAW CUT LINE	

AS-BUILT LEGEND

●	AS-BUILT STORM MANHOLE
■	AS-BUILT CURB INLET
▲	AS-BUILT STORM FLARED END
■	AS-BUILT SANITARY MANHOLE
●	AS-BUILT CLEANOUT
●	AS-BUILT FIRE HYDRANT
●	AS-BUILT WATER VALVE
●	AS-BUILT FIRE HOSE CONNECTION
●	AS-BUILT LIGHT STANDARD
■	AS-BUILT ELECTRIC TRANSFORMER
■	AS-BUILT ELECTRIC BOX
■	AS-BUILT ELECTRIC STUB

VEGETATION ESTABLISHMENT For Urban Development Sites APPENDIX A	
SEEDING RATES:	
PERMANENT:	
Tall Fescue - 150 lbs./ac.	
Smooth Bromes - 100 lbs./ac.	
Combined - Fescue @ 75 lbs./ac. AND Bromes @ 50 lbs./ac.	
TEMPORARY:	
Wheat or Rye - 150 lbs./ac. (3.5 lbs. per 1,000 s.f.)	
Oats - 120 lbs./ac. (2.75 lbs. per 1,000 s.f.)	
SEEDING PERIODS:	
Fescue or Bromes - March 1 to June 1	
August 1 to October 1	
Wheat or Rye - March 15 to November 1	
Oats - March 15 to September 15	
MULCH RATES:	
100 lbs. per 1000 sq. ft. (4,356 lbs. per ac.)	
FERTILIZER RATES:	
Nitrogen 30 lbs./ac.	
Phosphate 30 lbs./ac.	
Potassium 30 lbs./ac.	
Lime 600 lbs./ac. ENM*	
* ENM = effective neutralizing material as per State evaluation of quarried rock.	

* City of O'Fallon Construction work hours per City Ordinance 3429 as shown in section 500.420 of the Municipal Code of the City of O'Fallon are as follows:

October 1 through May 31
7:00 A.M. To 7:00 P.M. Monday Through Sunday
June 1 Through September 30
6:00 A.M. To 8:00 P.M. Monday Through Friday
7:00 A.M. To 8:00 P.M. Saturday and Sunday

* The area of this phase of development is 22.87 Acres

The area of land disturbance is 18.13 Acres
Number of proposed lots is 68
Building setback information: Front 25'
Side 6'
Rear 25'

* The estimated sanitary flow in gallons per day is 25,160 GPD

* Tree preservation calculations
Existing Trees = 8.11 Acres
Trees Removed = 2.77 Acres
Trees Saved = 5.34 Acres
Tree Preservation trees to be retained:
8.11 Acres x 20% = 1.62 Acres
1.62 Acres - 5.34 Acres (Saved) = 3.72 Acres
5.34 Acres > 3.72 Acres (No new trees required)

City approval of any construction site plans does not mean that any building can be constructed on the lots without meeting the building setbacks as required by the zoning codes. All installations and construction shall conform to the approved engineering drawings. However, if the developer chooses to make minor modifications in design and/or specifications during construction, they shall make such changes at their own risk, without any assurance that the City Engineer will approve the completed installation or construction. It shall be the responsibility of the developer to notify the City Engineer of any changes from the approved drawings. The developer may be required to correct the installed improvement so as to conform to the approved engineering drawings. The developer may request a letter from the Construction Inspection Division regarding any field changes approved by the City Inspector. Lighting values will be reviewed on site prior to the final occupancy inspection.

Conditions of Approval From Planning and Zoning

- The USPS shall be contacted to finalize their preferred method of mail delivery. A mail kiosk may be required in lieu of individual mail boxes for each lot. If a kiosk is required, the location of the kiosks and associated off-street parking shall be provided on the construction plans. Provide written confirmation from the USPS prior to construction plan approval that states their preferred method and location of mail delivery.
- Old Highway N is within Lake Saint Louis jurisdiction. Any roadway connection made to Old Highway N will require the review and approval of Lake Saint Louis.
- Commercial entrances onto Old Highway N shall be prohibited.
- The City had plans for a roundabout at Hwy N and Hawkridge Trail. The County Road Board had agreed to fund 50% of the improvements as part of economic development if the commercial property developed. With this development the commercial development opportunities have significantly decreased, however the traffic volume of the proposed development would be comparable. The total roundabout cost was estimated at \$400,000. The City requests that this development contribute 25% (\$100,000) towards the future construction of the roundabout.
- The submitted traffic study does not meet many of the City's concerns. The petitioner shall arrange a scoping meeting to discuss the City's concerns prior to revising the study and submission of the Final Plan.
- The applicant shall abide by the Municipal Code Requirements listed.

MUNICIPAL CODE REQUIREMENTS:

- An amended Area Plan will be required when the commercial portion of this development is proposed to be constructed.
- The Area Plan is the first step in the review and approval process. Should the Area Plan be approved a Final Plan is then required to be submitted. The Final Plan also requires a public hearing and sign posting.
- It was indicated in the response from the engineer, the villas and surrounding property are to be sold as separate lots. If this is the case, the lot lines shall be shown on the Final Plan.
- All signage shall be reviewed and approved through a separate permitting process. Easements for signs shall be provided on the plans. Also, the setbacks for the placement of a freestanding sign shall be met. Provide the setbacks in accordance with Chapter 410 of the Code on the Final Plan.
- Provide an approval letter from St. Charles County for the subdivision & street names.
- Per the Code, lots with double frontage and reversed frontage shall be avoided, except where necessary to provide separation of development from traffic arteries, or as otherwise required by topography or similar conditions. Providing a 10 foot common ground strip with landscaping could be a solution. This shall be addressed on the Final Plan.
- Under modifications the smallest lot is noted as 7,272 square feet, but the smallest lot shown on the plan is 7,440. Provide clarification with the Final Plan.
- Ordinance 5752, Article III of Chapter 402 addresses Tree Preservation. Correct note #14.
- The commercial lots shall be platted with the residential lots.
- Though the detention is designed with flap gates for flood control, any storage below the base flood elevation will not be counted toward the required detention.
- Provide a normal pool elevation and ensure the water depth is a minimum of 10' at normal pool.
- If the retaining wall near the detention basin remains, there will need to be a fence or guardrail where required at the top of the wall.
- Clarify the creek bank setback and undisturbed drainage easements by showing the centerline and both top of banks on the plan.
- In addition to a pavement upgrade ensure the proper right-of-way dedication is provided for Hwy N.

AS-BUILT PUBLIC UTILITY FINAL MEASUREMENTS

THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

SIGNED: [Signature]
P.E./L.S. DATE: _____



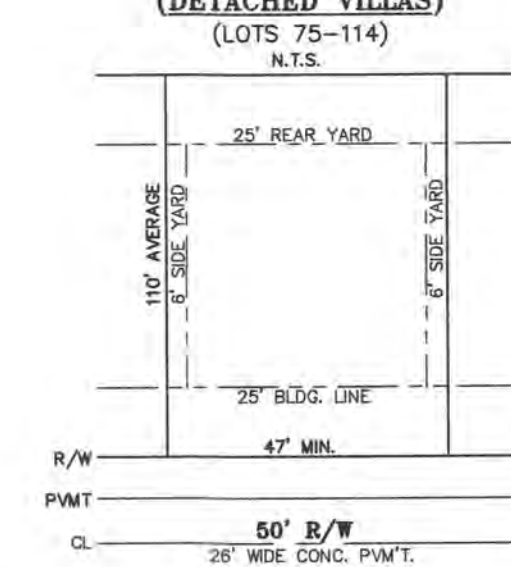
CALL BEFORE YOU DIG!
1-800-DIG-RITE



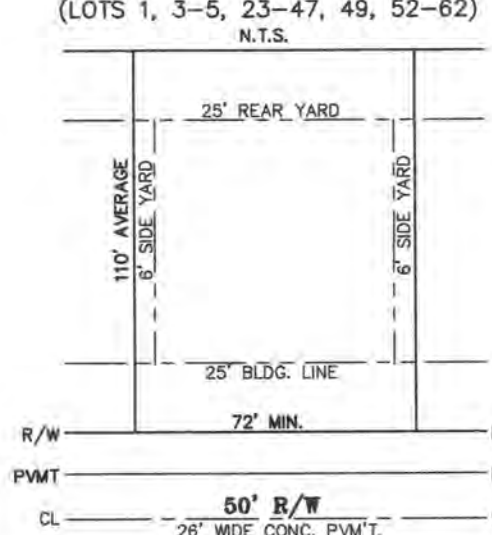
Drawing Index

1	COVER SHEET
2	NOTES
3-5	SITE PLAN
6-8	GRADING PLAN
9-11A	WATER PLAN
12-14	SEDIMENT & EROSION CONTROL PLAN
15-16	STREET PROFILES
17-18	WARINGS & INTERSECTION DETAILS
19-21	SANITARY SEWER PROFILES
22-24	STORM SEWER PROFILES
25	LANDSCAPE PLAN
26	SIGNAGE, STRIPING & JOINTING PLAN
27	PRE-DEVELOPED DRAINAGE AREA MAP
28-30	POST-DEVELOPED DRAINAGE AREA MAP
31-33	LIGHTING PLAN
34	DETAILS
35	DETAILS
36	DETAILS
37-38	DETAILS
39	DETAILS
39A	DETAILS
40-41	DETAILS

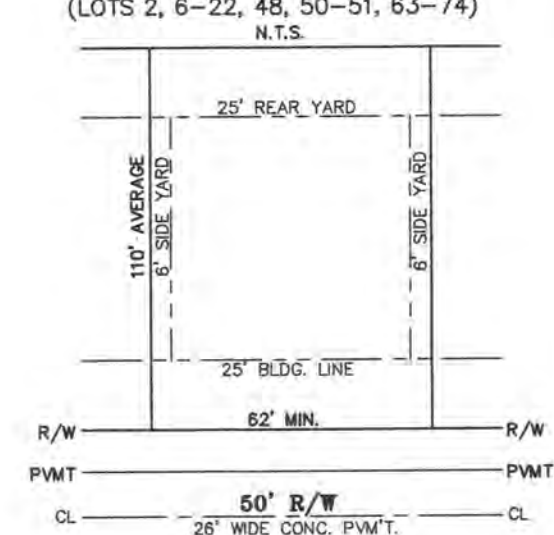
47' WIDE LOTS (DETACHED VILLAS)



72' WIDE LOTS (LOTS 1, 3-5, 23-47, 49, 52-62)



62' WIDE LOTS (LOTS 2, 6-22, 48, 50-51, 63-74)



Benchmarks Project

ALL AS-BUILT ITEMS HAVE BEEN LOCATED AND TIED TO MISSOURI STATE PLANE COORDINATE SYSTEM OF 1983, EAST ZONE, GRID NORTH, NAD83 FOR HORIZONTAL DATUM AND NAVD88 FOR VERTICAL DATUM.

HORIZONTAL DATUM: MISSOURI COORDINATE SYSTEM OF 1983, EAST ZONE, (GRID NORTH), NAD83

REFERENCE BENCHMARK:
A-149 - ELEVATION 630.08 - NAVD88 DATUM - STANDARD DISK, STAMPED A 149 1935. LOCATED IN THE NORTHWEST WINGWALL OF THE NORFOLK AND WESTERN RAILROAD BRIDGE OVER US HIGHWAY 61 BUSINESS.

Site

SITE BENCHMARK:
ELEVATION 601.52 NAVD88 DATUM - FIRE HYDRANT LOCATED AT THE NORTHEAST CORNER OF LOT IC OF THE VILLAGES AT SPRINGHURST.

PROJECT TITLE:
**LEGENDS POINTE
PHASE ONE
AS-BUILT PLANS**
(formerly THE VILLAGES
AT RHODES FARM)



Box Engineering Company, Inc.
Missouri State Certificate of Authority
Engineering #000655
Missouri State Certificate of Authority
Surveying #000144

REVISIONS

06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

Developer / Owner:
KAPB, L.L.C.
410 CRESTVIEW DRIVE
O'FALLON, MO 63366
636-272-4200

P+Z No.
#27-15.05, 05/11/17

City No.
#CITY

Page No.
1 of 41

COVER SHEET

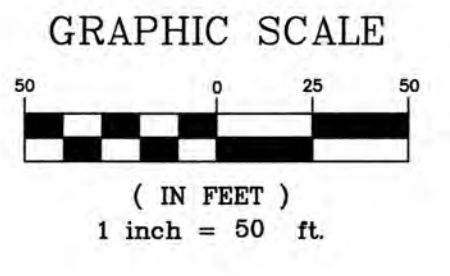
Box Project #12-154708 Issue Date: 01/17/2018

PROPERTY N/F
SR DEVELOPMENT, LLC
6508/1241

MODOT NOTE:
ALL UTILITY WORK (OTHER THAN STORM SEWER) WILL REQUIRE A SEPARATE PERMIT. CONTACT STEVE BELCHER (STEVEN.BELCHER@MODOT.MO.GOV) 636-477-5041.

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE LOCATED PRIOR TO ANY GRADING OR CONSTRUCTION OF THE IMPROVEMENTS.

DUCKETT CREEK NOTES:
1. CONNECTION OF COMMERCIAL LOTS REQUIRES SEPARATE DCSD REVIEW AND APPROVAL.



GRAPHIC SCALE
(IN FEET)
1 inch = 50 ft.

PROJECT TITLE:
**LEGENDS POINTE
PHASE ONE
AS-BUILT PLANS**
(formerly THE VILLAGES
AT RHODES FARM)

**ENGINEERING
PLANNING
SURVEYING**
221 Point West Blvd.
St. Charles, MO 63301
636-928-5562
FAX 636-928-1718



DISCLAIMER OF RESPONSIBILITY
I hereby certify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

Box Engineering Company, Inc.
Missouri State Certificate of Authority
Engineering #000655
Missouri State Certificate of Authority
Surveying #00144

REVISIONS

DATE	DESCRIPTION
1/22/18	PWS#2 REVISIONS
06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

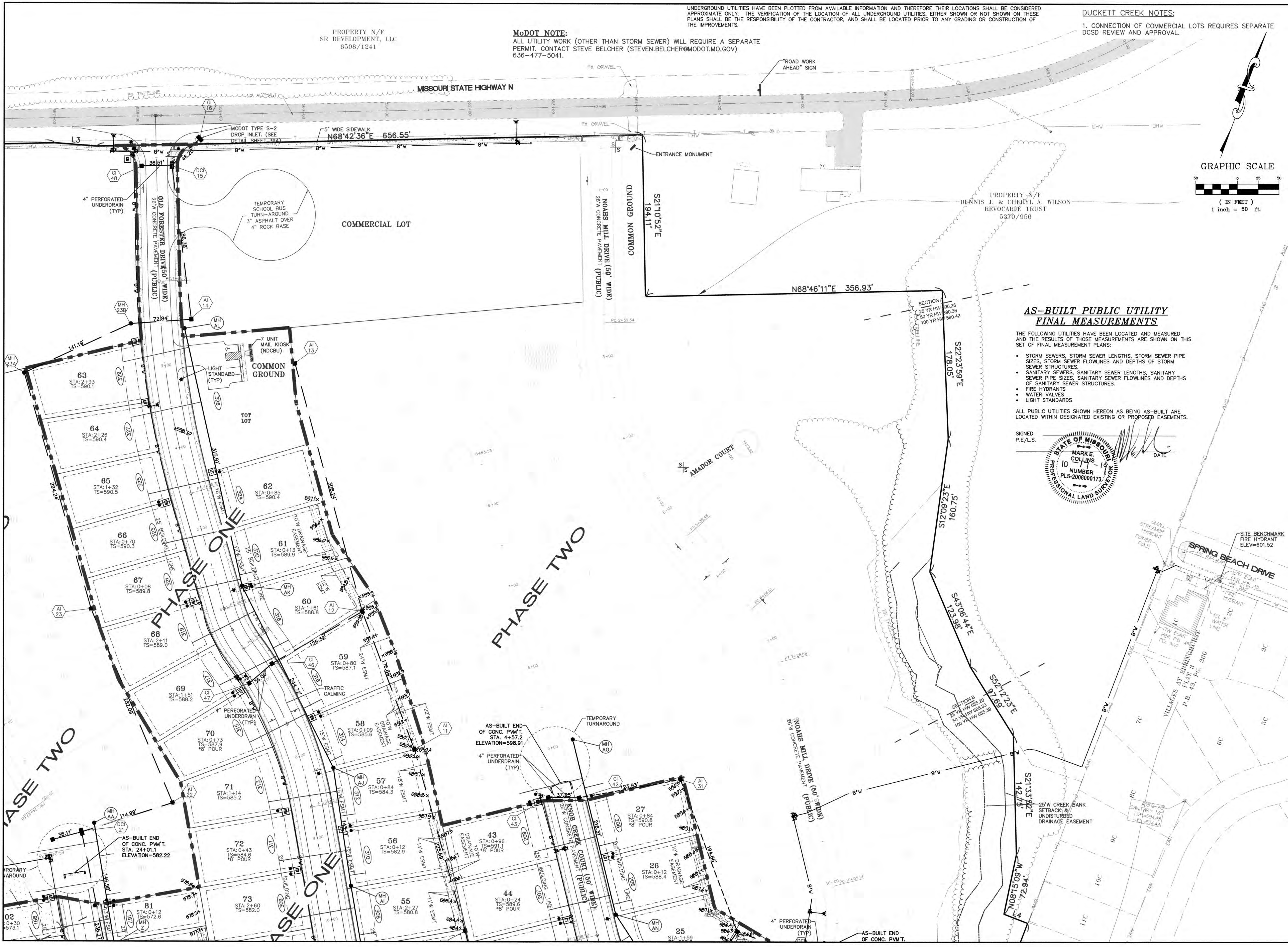
Developer / Owner:
KAPB, L.L.C.
410 CRESTVIEW DRIVE
O'FALLON, MO 63366
636-272-4200

P+Z No.
#27-15.05, 05/11/17

City No.
#CITY

Page No.
3 of 41

SITE PLAN



**AS-BUILT PUBLIC UTILITY
FINAL MEASUREMENTS**

THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

SIGNED: _____ DATE: _____
P.E./L.S. MARK E. COLLINS
STATE OF MISSOURI
PROFESSIONAL LAND SURVEYOR
NUMBER PLS-200800173

AS-BUILT PUBLIC UTILITY FINAL MEASUREMENTS

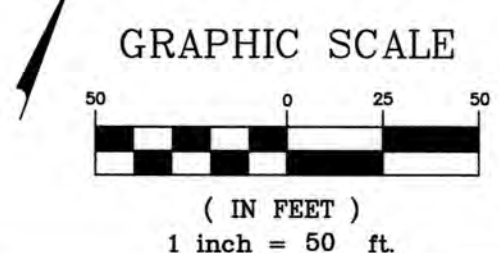
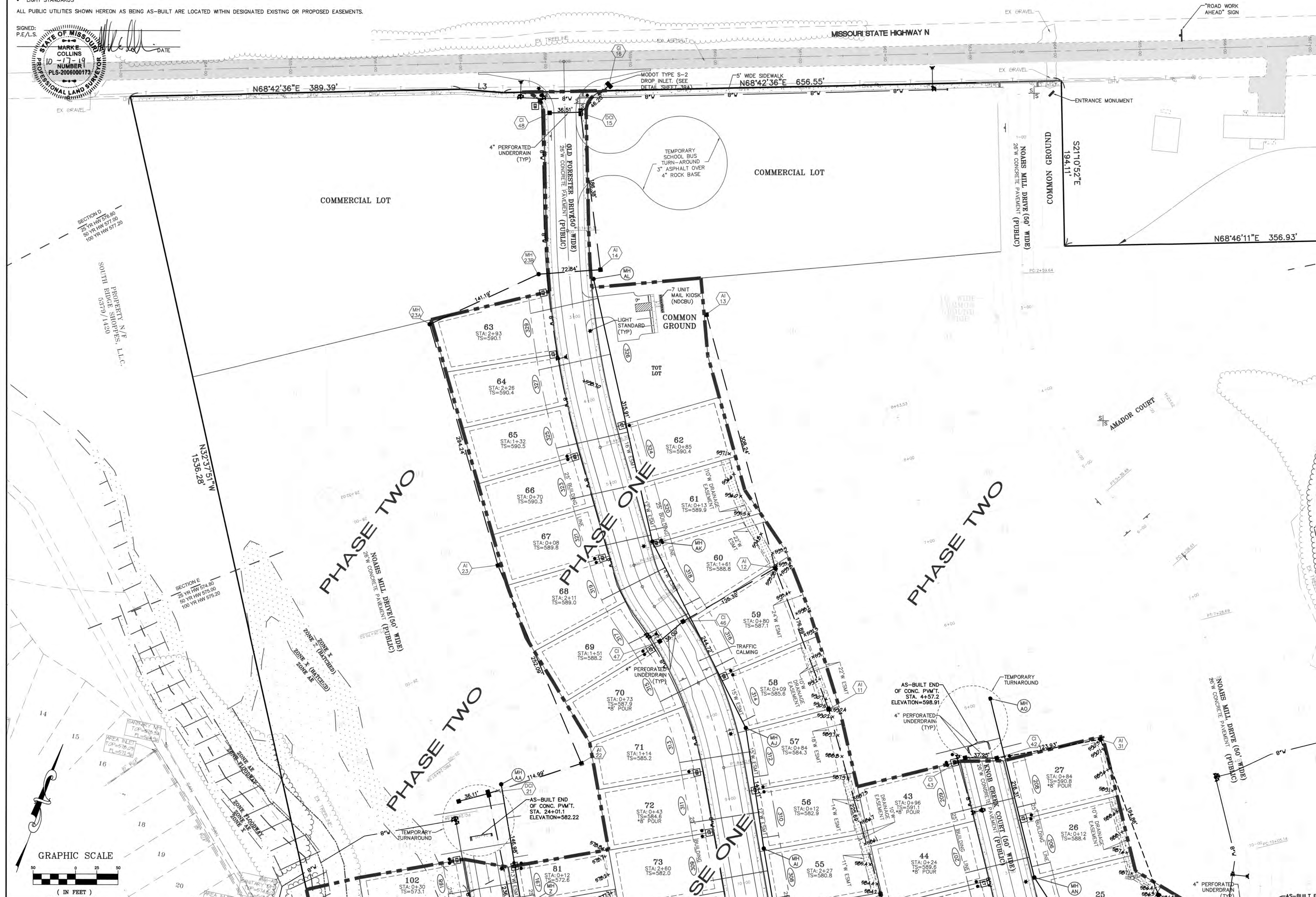
THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

MODOT NOTE:
ALL UTILITY WORK (OTHER THAN STORM SEWER) WILL REQUIRE A SEPARATE PERMIT. CONTACT STEVE BELCHER (STEVEN.BELCHER@MODOT.MO.GOV) 636-477-5041.

SIGNED: P.E./L.S. DATE



PROJECT TITLE:
**LEGENDS POINT
PHASE ONE
AS-BUILT PLANS**
(formerly THE VILLAGES
AT RHODES FARM)

**ENGINEERING
PLANNING
SURVEYING**
221 Point West Blvd. #3301
St. Charles, MO 63301
636-929-5552
FAX 636-929-1716



DISCLAIMER OF RESPONSIBILITY
I hereby specify that the documents intended to be authenticated by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

Box Engineering Company, Inc.
Missouri State Certificate of Authority
Engineering #000655
Missouri State Certificate of Authority
Surveying #000144

REVISIONS

DATE	DESCRIPTION
1/22/18	PWS#2 REVISIONS
06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

Developer / Owner:
KAPB, L.L.C.
410 CRESTVIEW DRIVE
O'FALLON, MO 63366
636-272-4200

P+Z No.
#27-15.05, 05/11/17

City No.
#CITY

Page No.
4 of 41

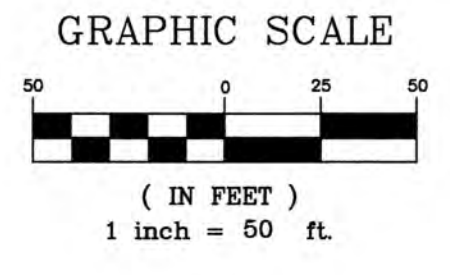
Box Project # 12-154708 Issue Date: 01/17/2018

SITE PLAN

PROPERTY N/F
SR DEVELOPMENT, LLC
6508/1241

MISSOURI STATE HIGHWAY N

PROPERTY N/F
DENNIS J. & CHERYL A. WILSON
REVOCABLE TRUST
5370/956



PROJECT TITLE:
**LEGENDS POINTE
PHASE ONE
AS-BUILT PLANS**
(formerly THE VILLAGES
AT RHODES FARM)

Box Project # 12-154708 Issue Date: 01/17/2018

**ENGINEERING
PLANNING
SURVEYING**

221 Point West Blvd. #3301
St. Charles, MO 63301
636-929-5552 FAX 636-928-1718



DISCLAIMER OF RESPONSIBILITY
I hereby specify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

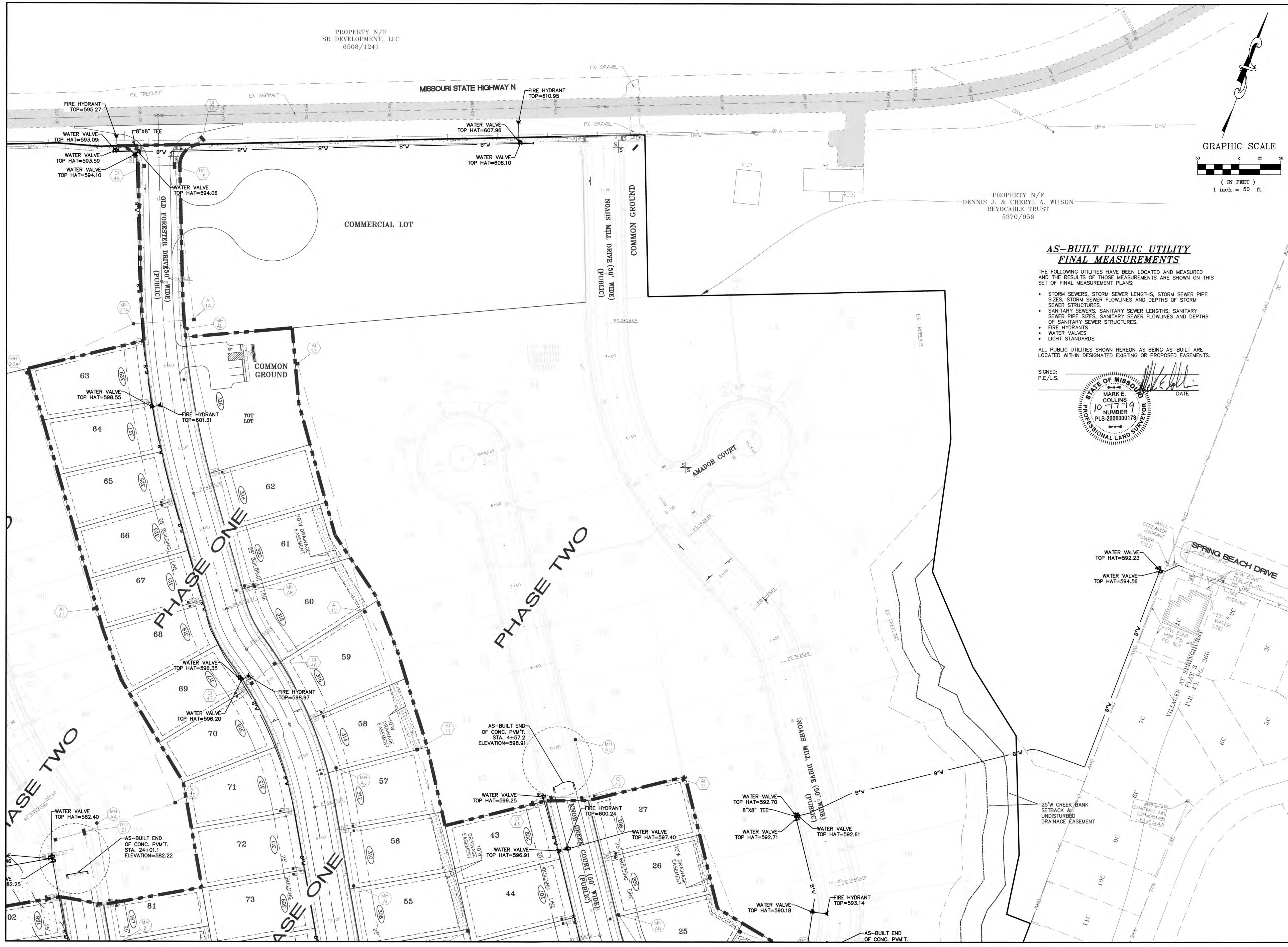
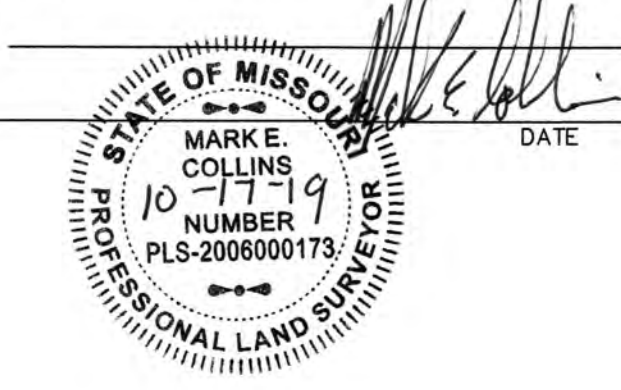
**AS-BUILT PUBLIC UTILITY
FINAL MEASUREMENTS**

THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

SIGNED:
P.E./L.S.



Box Engineering Company, Inc.
Missouri State Certificate of Authority
Engineering #000655
Missouri State Certificate of Authority
Surveying #000144

REVISIONS

DATE	REVISIONS
1/22/18	PWS#2 REVISIONS
06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

Developer / Owner:
KAPB, L.L.C.
410 CRESTVIEW DRIVE
O'FALLON, MO 63366
636-272-4200

P+Z No.
#27-15.05, 05/11/17

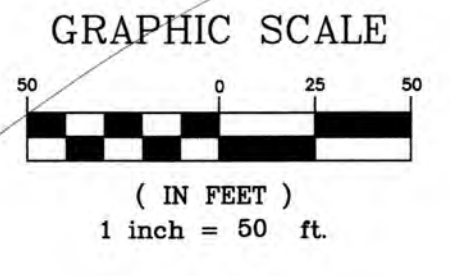
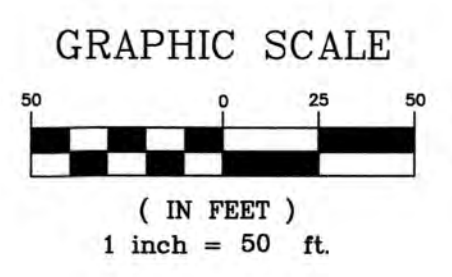
City No.
#CITY

Page No.
9 of 41

WATER PLAN

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE LOCATED PRIOR TO ANY GRADING OR CONSTRUCTION OF THE IMPROVEMENTS.

MO DOT NOTE:
ALL UTILITY WORK (OTHER THAN STORM SEWER) WILL REQUIRE A SEPARATE PERMIT. CONTACT STEVE BELCHER (STEVEN.BELCHER@MODOT.MO.GOV) 636-477-5041.



P.W.S.D. NO.2 NOTES:

1. ALL OFFSITE RESTORATION WILL BE REQUIRED TO BE RESTORED WITH SOD UNLESS OTHERWISE AGREED UPON IN WRITING BY THE AFFECTED OFFSITE PROPERTY OWNER.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CITY, COUNTY, AND/OR MO DOT PERMITS FOR WORK WITHIN RIGHT-OF-WAY.

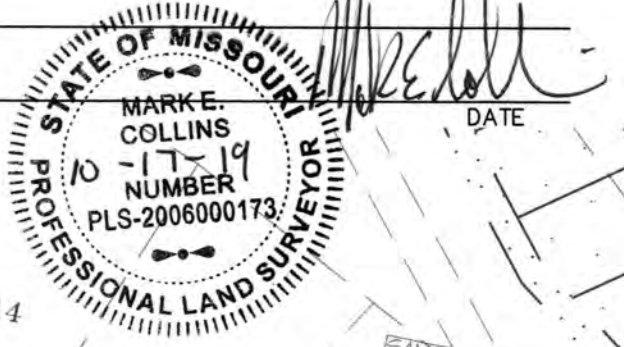
AS-BUILT PUBLIC UTILITY FINAL MEASUREMENTS

THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

SIGNED: P.E./L.S. DATE



PROJECT TITLE:
LEGENDS POINTE PHASE ONE AS-BUILT PLANS
(formerly THE VILLAGES AT RHODES FARM)
Box Project # 12-154708 Issue Date: 01/17/2018

ENGINEERING PLANNING SURVEYING
221 Point West Blvd.
St. Charles, MO 63301
636-928-5562 FAX 636-928-1718



DISCLAIMER OF RESPONSIBILITY
I hereby certify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

Box Engineering Company, Inc.
Missouri State Certificate of Authority Engineering #000655
Missouri State Certificate of Authority Surveying #002144

REVISIONS

DATE	REVISIONS
1/22/18	PWS#2 REVISIONS
06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

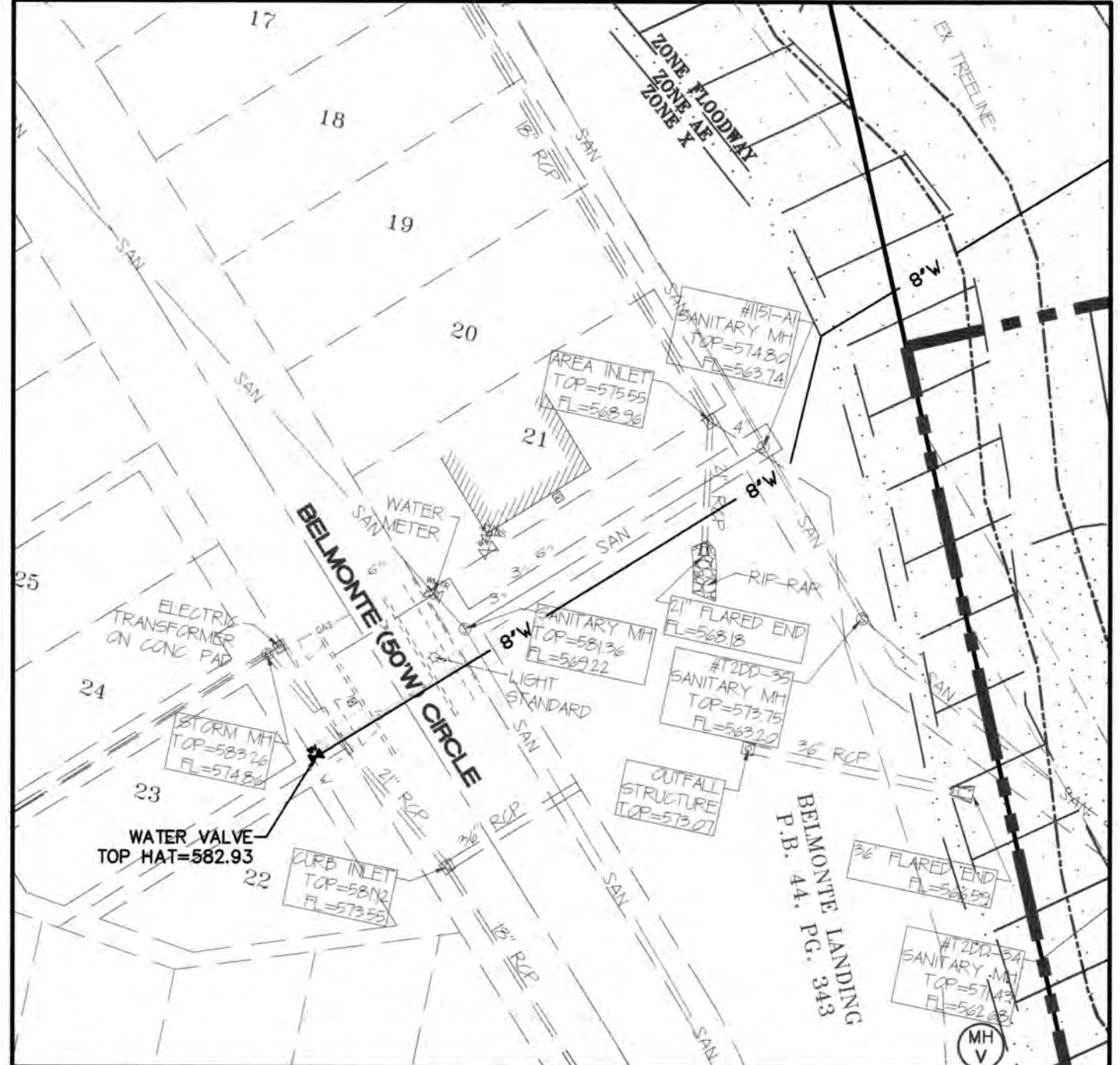
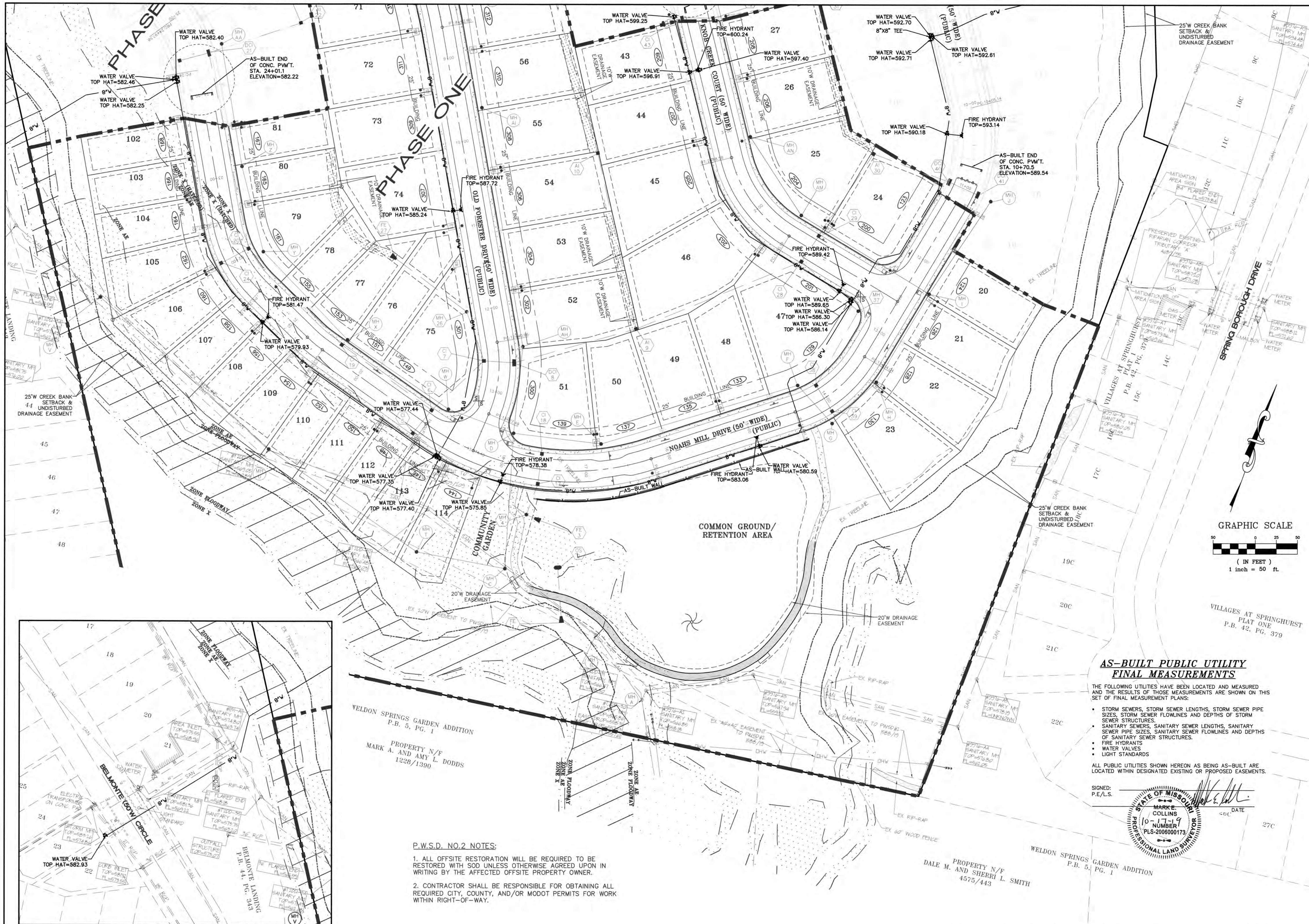
Developer / Owner:
KAPB, L.L.C.
410 CRESTVIEW DRIVE
O'FALLON, MO 63366
636-272-4200

P+Z No.
#27-15.05, 05/11/17

City No.
#CITY

Page No.
10 of 41

WATER PLAN



- P.W.S.D. NO.2 NOTES:**
1. ALL OFFSITE RESTORATION WILL BE REQUIRED TO BE RESTORED WITH SOD UNLESS OTHERWISE AGREED UPON IN WRITING BY THE AFFECTED OFFSITE PROPERTY OWNER.
 2. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CITY, COUNTY, AND/OR MODOT PERMITS FOR WORK WITHIN RIGHT-OF-WAY.

AS-BUILT PUBLIC UTILITY FINAL MEASUREMENTS

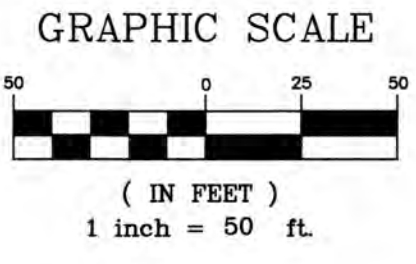
THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

SIGNED: P.E./L.S. *[Signature]* DATE: *[Date]*

STATE OF MISSOURI
 MARK E. COLLINS
 10-17-19
 NUMBER PLS-2006000173
 PROFESSIONAL LAND SURVEYOR



PROJECT TITLE:
LEGENDS POINTE
PHASE ONE
AS-BUILT PLANS
 (formerly THE VILLAGES AT RHODES FARM)

ENGINEERING PLANNING SURVEYING
 221 Point West Blvd.
 St. Charles, MO 63301
 636-928-6562
 FAX 636-928-1718



DISCLAIMER OF RESPONSIBILITY
 I hereby certify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

Boy Engineering Company, Inc.
 Missouri State Certificate of Authority
 Engineering #000655
 Missouri State Certificate of Authority
 Surveying #002144

REVISIONS

DATE	REVISIONS
1/22/18	PWS#2 REVISIONS
06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

Developer / Owner:
 KAPB, L.L.C.
 410 CRESTVIEW DRIVE
 OFALLON, MO 63366
 636-272-4200

P+Z No.
 #27-15.05, 05/11/17

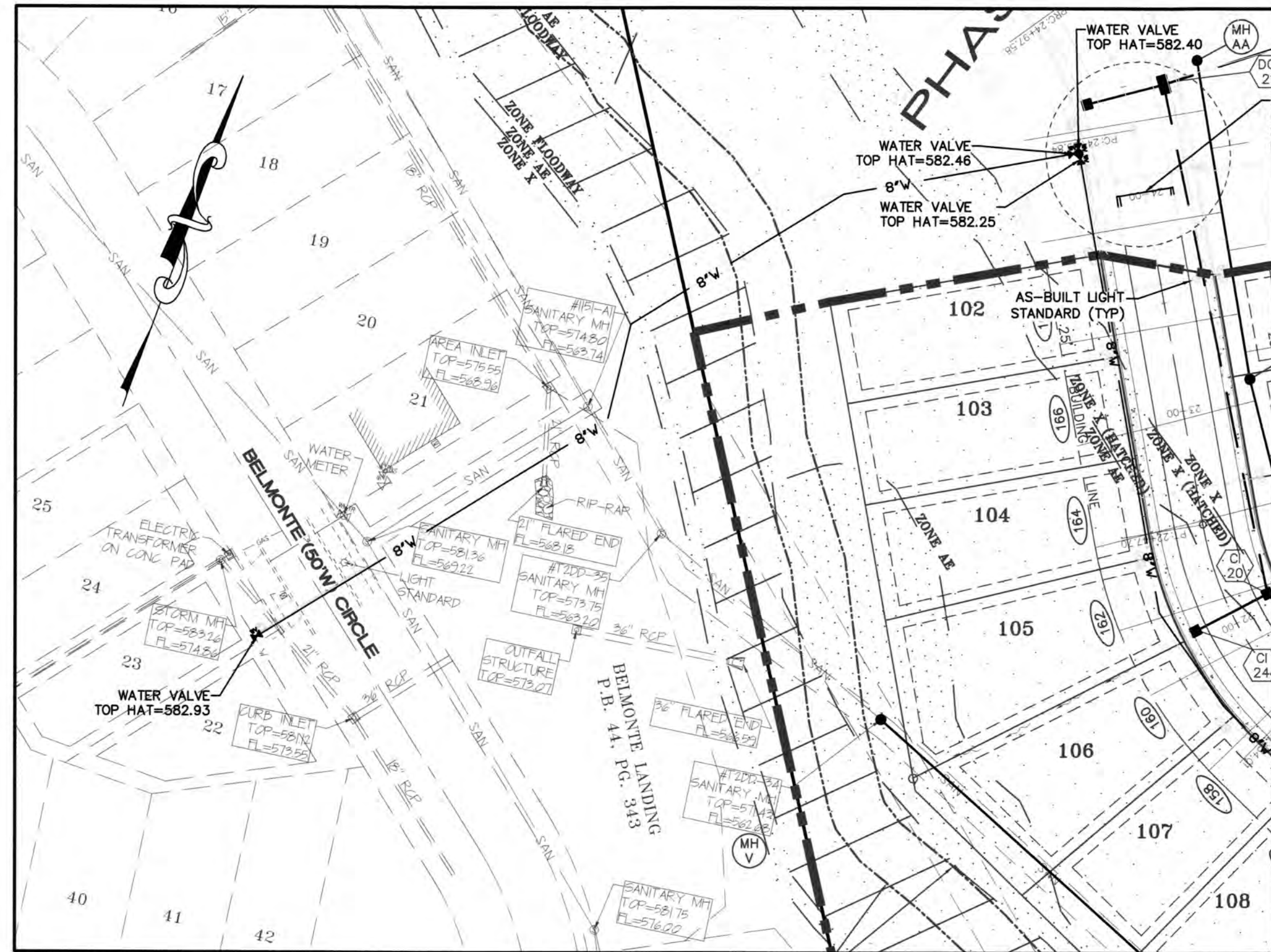
City No.
 #CITY

Page No.
 11 of 41

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE LOCATED PRIOR TO ANY GRADING OR CONSTRUCTION OF THE IMPROVEMENTS.

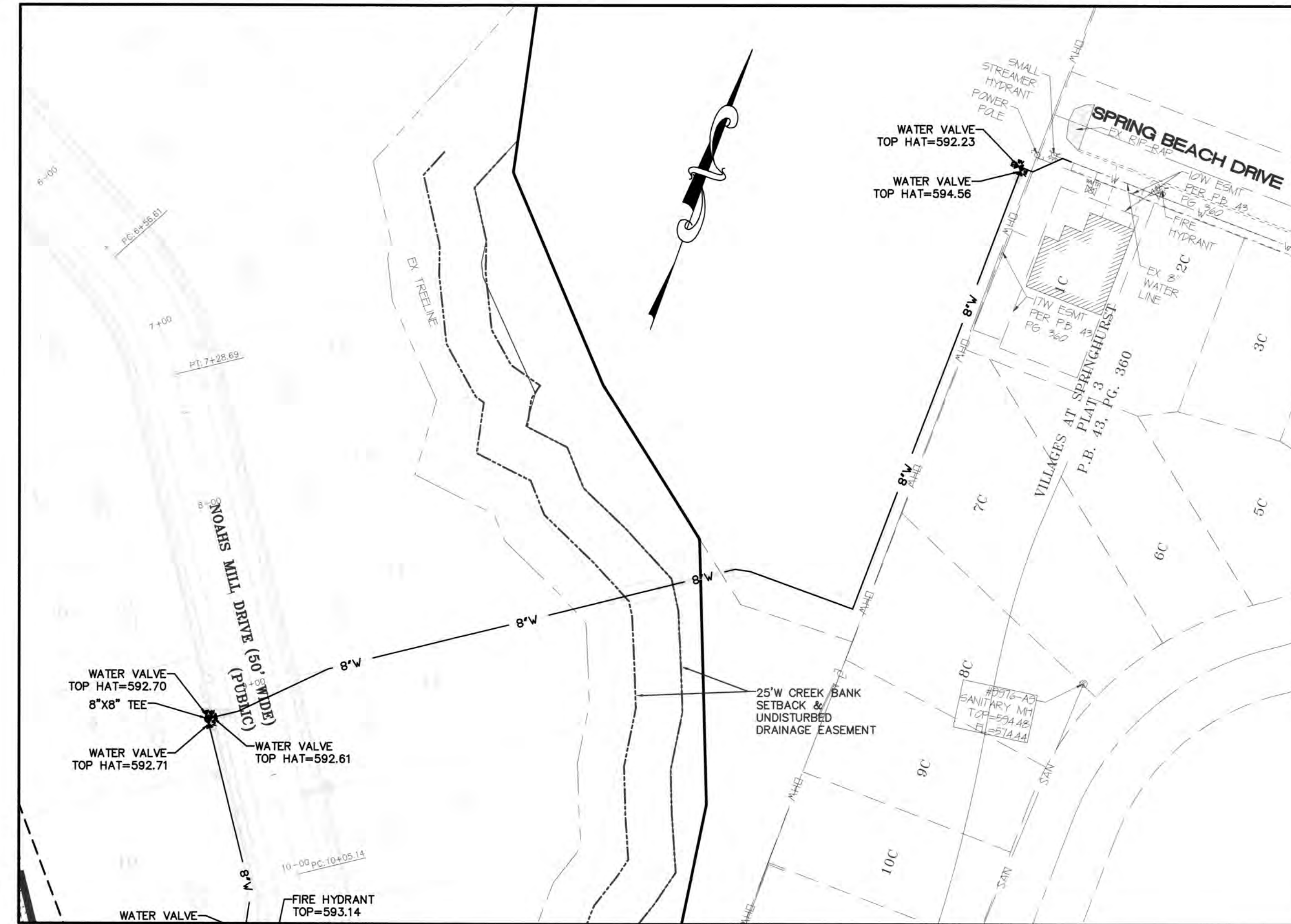
P.W.S.D. NO.2 NOTES:

1. ALL OFFSITE RESTORATION WILL BE REQUIRED TO BE RESTORED WITH SOD UNLESS OTHERWISE AGREED UPON IN WRITING BY THE AFFECTED OFFSITE PROPERTY OWNER.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CITY, COUNTY, AND/OR MODOT PERMITS FOR WORK WITHIN RIGHT-OF-WAY.



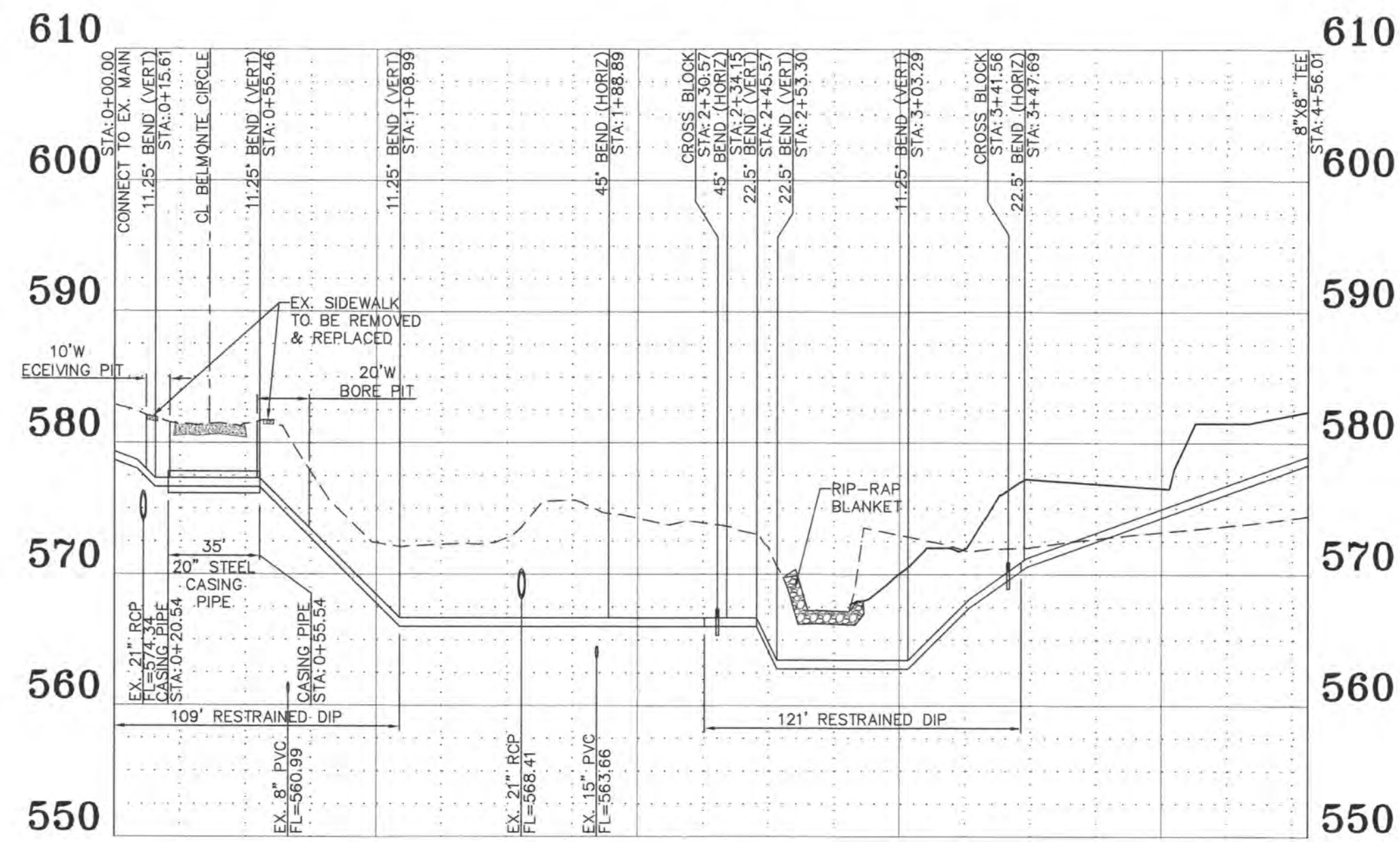
WEST OFFSITE WATER MAIN EXTENSION DETAIL

SCALE: 1" = 50'



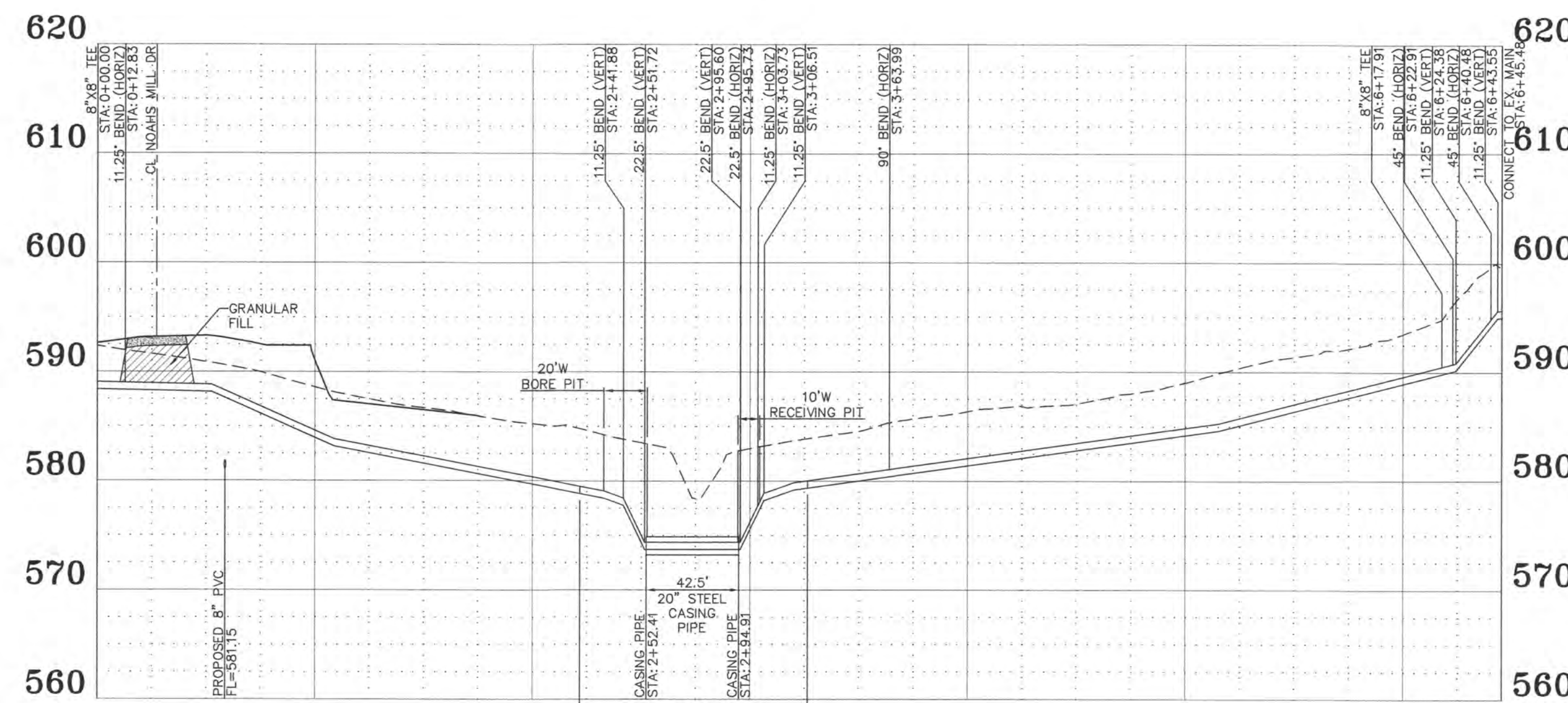
EAST WATER MAIN EXTENSION DETAIL

SCALE: 1" = 50'



WEST WATER MAIN EXTENSION PROFILE

SCALE: HORIZ. 1" = 50' VERT. 1" = 10'



EAST WATER MAIN EXTENSION PROFILE

SCALE: HORIZ. 1" = 50' VERT. 1" = 10'

AS-BUILT PUBLIC UTILITY FINAL MEASUREMENTS

THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

SIGNED: DATE: _____
 P.E./L.S. MARK E. COLLINS
 STATE OF MISSOURI PROFESSIONAL LAND SURVEYOR
 NUMBER: 10111 NUMBER: _____
 PLS-2006000173

PROJECT TITLE:
**LEGENDS POINTE
 PHASE ONE
 AS-BUILT PLANS**
 (formerly THE VILLAGES
 AT RHODES FARM)

ENGINEERING
 PLANNING
 SURVEYING
 221 Point West Blvd.
 St. Charles, MO 63301
 636-928-5562
 FAX 928-1718



DISCLAIMER OF RESPONSIBILITY
 I hereby specify that the documents intended to be authenticated by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other Drawings, Specifications, Estimates, Reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

Box Engineering Company, Inc.
 Missouri State Certificate of Authority
 Engineering #000655
 Missouri State Certificate of Authority
 Surveying #000144

REVISIONS	
1/22/18	PWS#2 REVISIONS
06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

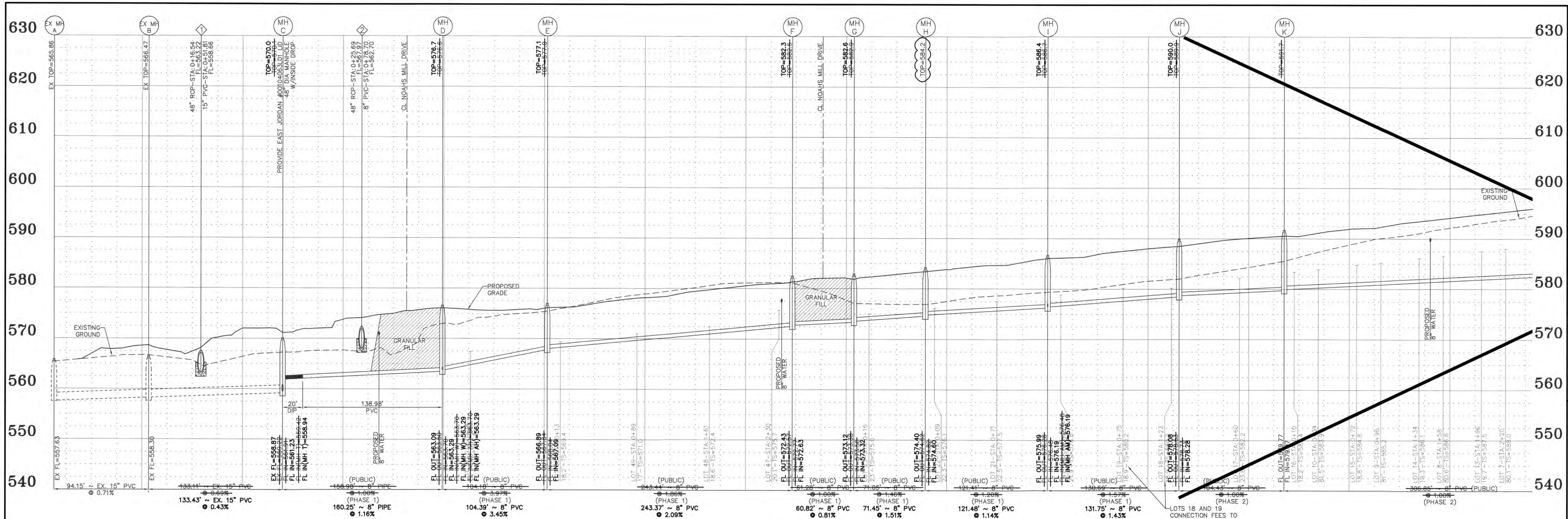
Developer / Owner:
 KAPB, L.L.C.
 410 CRESTVIEW DRIVE
 OFALLON, MO 63366
 636-272-4200

P+Z No.
 #27-15.05, 05/11/17
 City No.
 #CITY

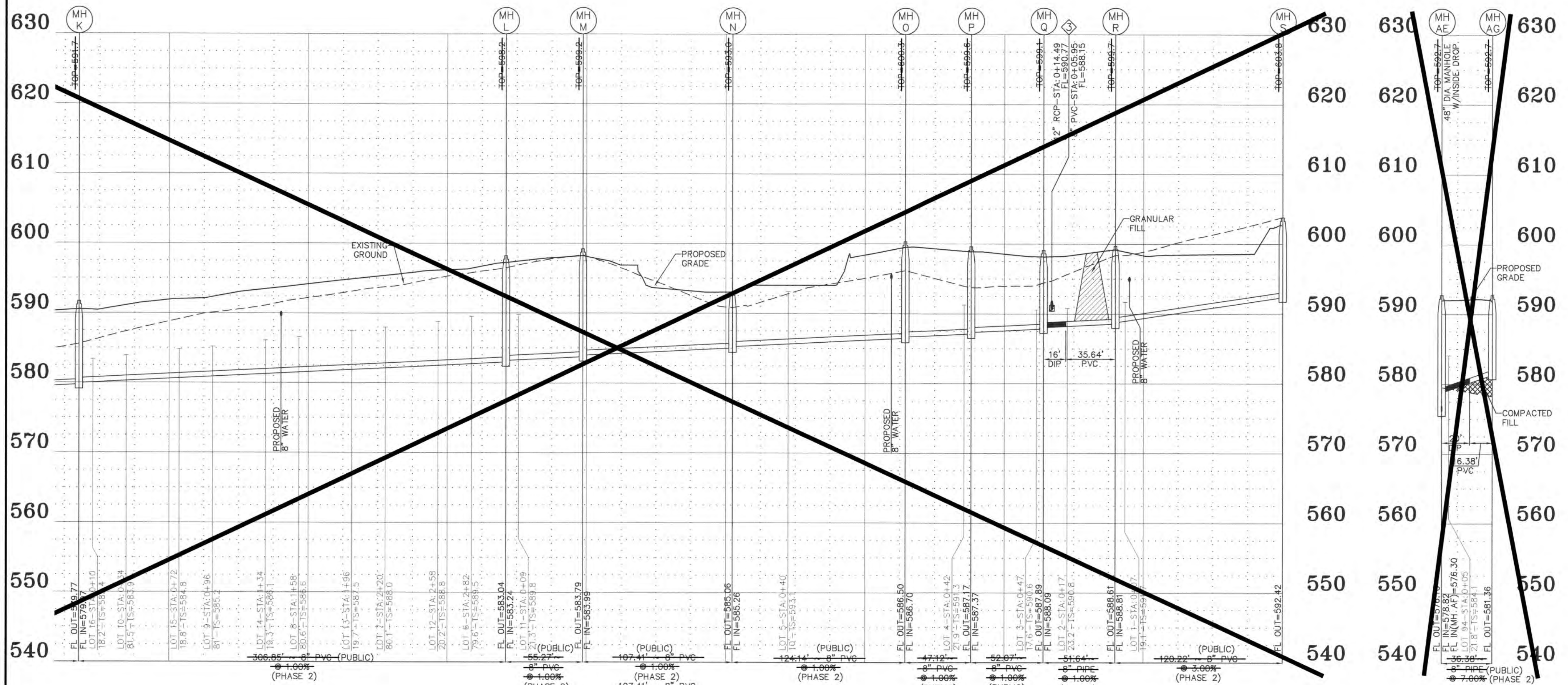
Page No.
 11A of 41

WATER PLAN

Box Project # 12-154708 Issue Date: 01/17/2018



SANITARY SEWER PROFILE
 SCALES:
 HORIZ. 1"=50'
 VERT. 1"=10'



SANITARY SEWER PROFILE
 SCALES:
 HORIZ. 1"=50'
 VERT. 1"=10'

SANITARY SEWER PROFILE
 SCALES:
 HORIZ. 1"=50'
 VERT. 1"=10'

DUCKETT CREEK SANITARY DISTRICT NOTES:

- EXISTING SANITARY SEWER SERVICE SHALL NOT BE INTERRUPTED.
- CONSTRUCTION OF SANITARY SEWERS REQUIRES DCSD INSPECTION. CONTACT THE DCSD INSPECTION DEPARTMENT AT 636-441-1244 TO SCHEDULE INSPECTION. 48-HOUR ADVANCE NOTICE ID REQUIRED.
- LOTS 18, 19, 28, 42, 82, 83, 100 & 101 CONNECTION FEES TO BE PAID AT PHASE 2.

CITY OF O'FALLON NOTES:

- ALL SANITARY LATERALS AND SANITARY MAINS THAT CROSS UNDER THE PAVEMENT MUST HAVE PROPER GRANULAR BACKFILL AND REQUIRED COMPACTION.
- ALL SANITARY SEWER LATERALS SHALL BE A MINIMUM SCHEDULE 40 PIPE MATERIAL, FROM THE SEWER MAIN TO THE BUILDING, UNLESS THE SEWER DISTRICT HAS A HIGHER MINIMUM AT WHICH THAT MATERIAL SHALL BE USED.

AS-BUILT PUBLIC UTILITY FINAL MEASUREMENTS

THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

SIGNED: _____
 P.E./L.S. _____
 DATE: _____

STATE OF MISSOURI
 MARK E. COLLINS
 10-17-19
 NUMBER
 PLS-2006000173
 PROFESSIONAL LAND SURVEYOR

PROJECT TITLE:
LEGENDS POINTE
PHASE ONE
AS-BUILT PLANS
 (formerly THE VILLAGES
 AT RHODES FARM)

ENGINEERING
PLANNING
SURVEYING

221 Point West Blvd.
 St. Charles, MO 63301
 636-928-5552
 FAX 636-928-1718



DISCLAIMER OF RESPONSIBILITY
 I hereby certify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

Box Engineering Company, Inc.
 Missouri State Certificate of Authority
 Engineering #000655
 Missouri State Certificate of Authority
 Surveying #000144

REVISIONS

DATE	REVISIONS
06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

Developer / Owner:
 KAPB, L.L.C.
 410 CRESTVIEW DRIVE
 O'FALLON, MO 63366
 636-272-4200

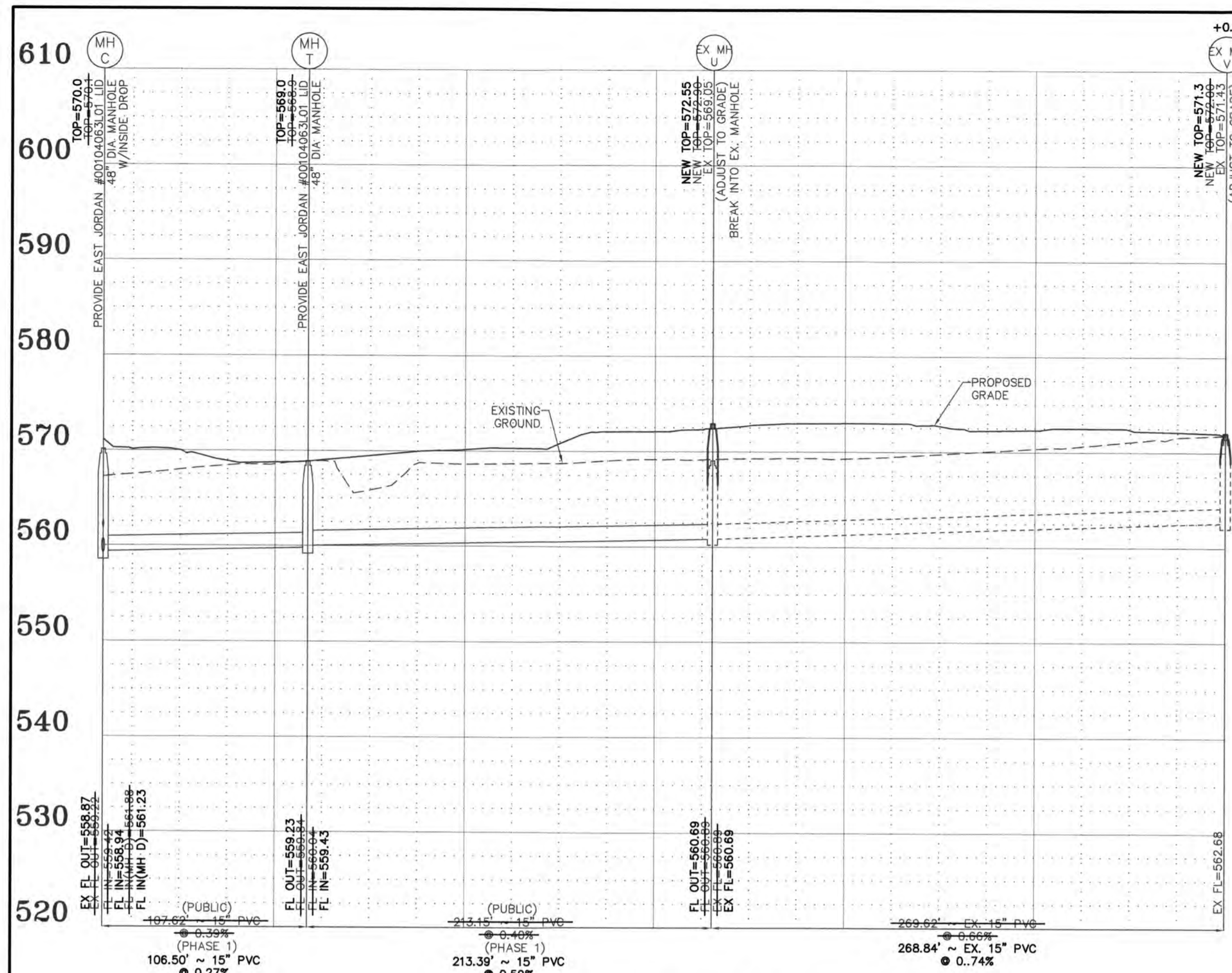
P+Z No.
 #27-15.05, 05/11/17

City No.
 #CITY

Page No.
 19 of 41

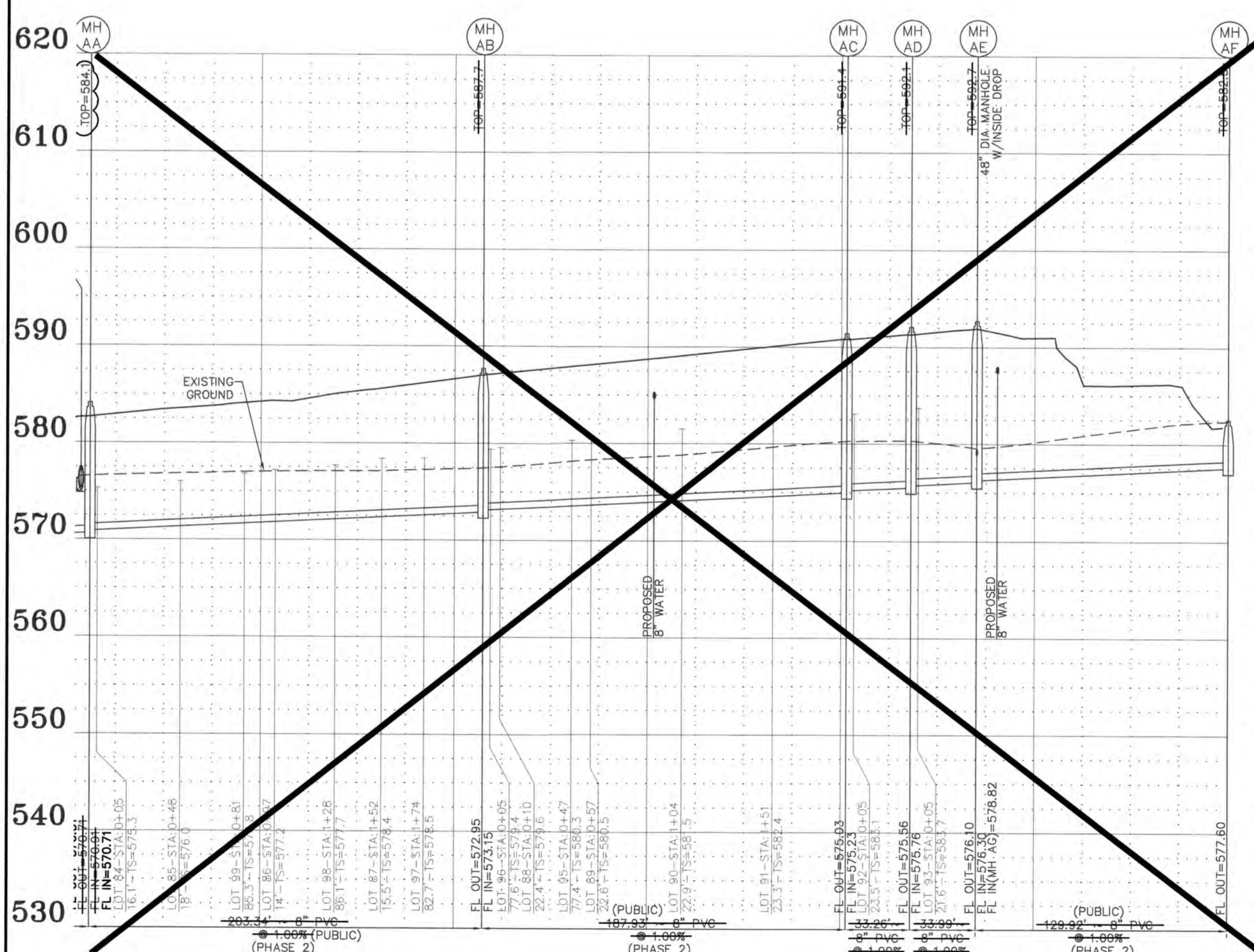
SANITARY SEWER PROFILES

Box Project # 12-154708 Issue Date: 01/17/2018



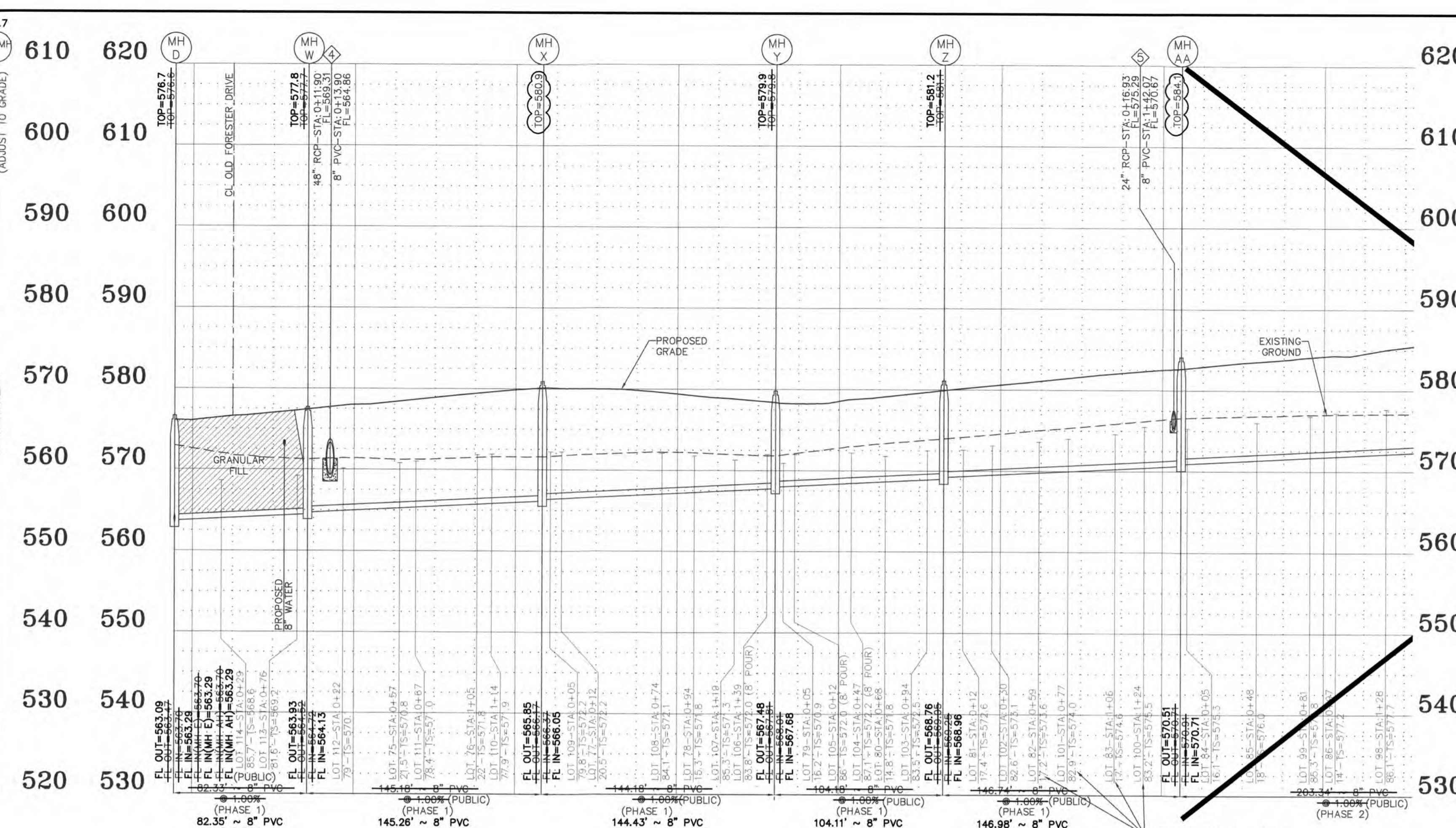
SANITARY SEWER PROFILE

SCALES:
HORIZ. 1"=50'
VERT. 1"=10'



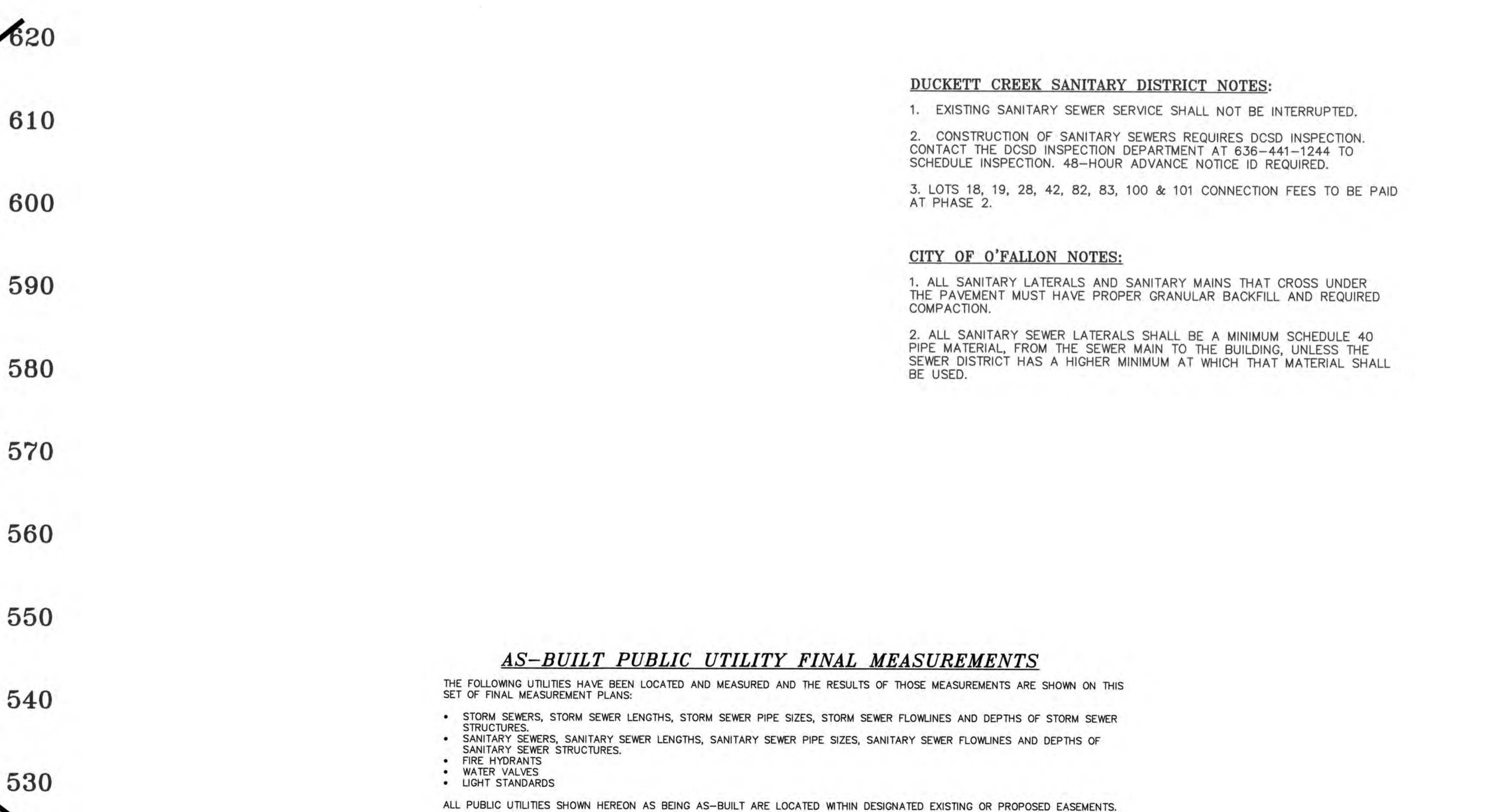
SANITARY SEWER PROFILE

SCALES:
HORIZ. 1"=50'
VERT. 1"=10'



SANITARY SEWER PROFILE

SCALES:
HORIZ. 1"=50'
VERT. 1"=10'



SANITARY SEWER PROFILE

SCALES:
HORIZ. 1"=50'
VERT. 1"=10'

AS-BUILT PUBLIC UTILITY FINAL MEASUREMENTS

THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

SIGNED:
P.E./L.S.



DUCKETT CREEK SANITARY DISTRICT NOTES:

1. EXISTING SANITARY SEWER SERVICE SHALL NOT BE INTERRUPTED.
2. CONSTRUCTION OF SANITARY SEWERS REQUIRES DCSD INSPECTION. CONTACT THE DCSD INSPECTION DEPARTMENT AT 636-441-1244 TO SCHEDULE INSPECTION. 48-HOUR ADVANCE NOTICE IS REQUIRED.
3. LOTS 18, 19, 28, 42, 82, 83, 100 & 101 CONNECTION FEES TO BE PAID AT PHASE 2.

CITY OF O'FALLON NOTES:

1. ALL SANITARY LATERALS AND SANITARY MAINS THAT CROSS UNDER THE PAVEMENT MUST HAVE PROPER GRANULAR BACKFILL AND REQUIRED COMPACTION.
2. ALL SANITARY SEWER LATERALS SHALL BE A MINIMUM SCHEDULE 40 PIPE MATERIAL, FROM THE SEWER MAIN TO THE BUILDING, UNLESS THE SEWER DISTRICT HAS A HIGHER MINIMUM AT WHICH THAT MATERIAL SHALL BE USED.

PROJECT TITLE:
LEGENDS POINTE
PHASE ONE
AS-BUILT PLANS
(formerly THE VILLAGES
AT RHODES FARM)



ENGINEERING
PLANNING
SURVEYING

221 Point West Blvd.
St. Charles, MO 63301
636-929-6552
FAX 636-1718

Box Engineering Company, Inc.
Missouri State Certificate of Authority
Engineering #000655
Surveying #000144

REVISIONS

06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

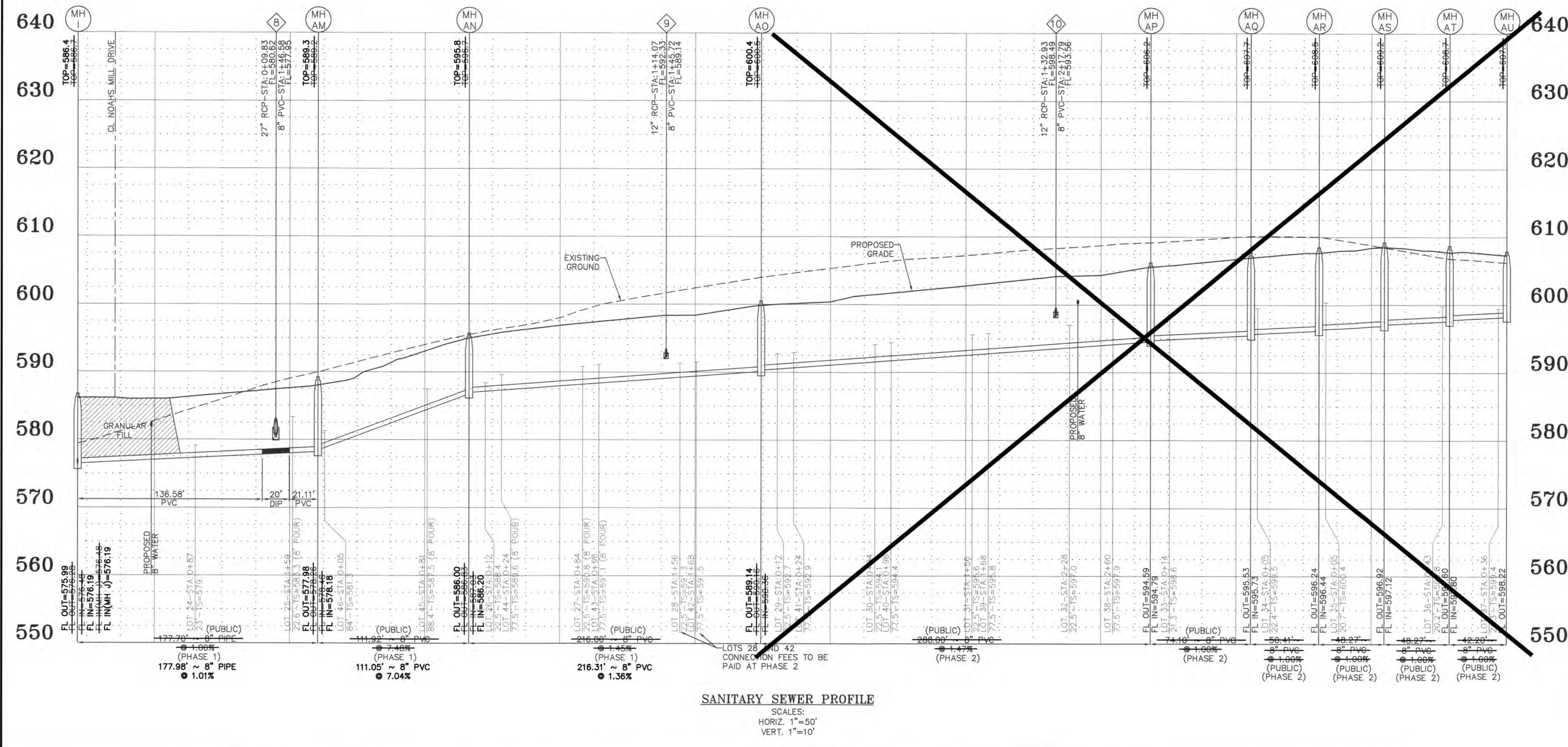
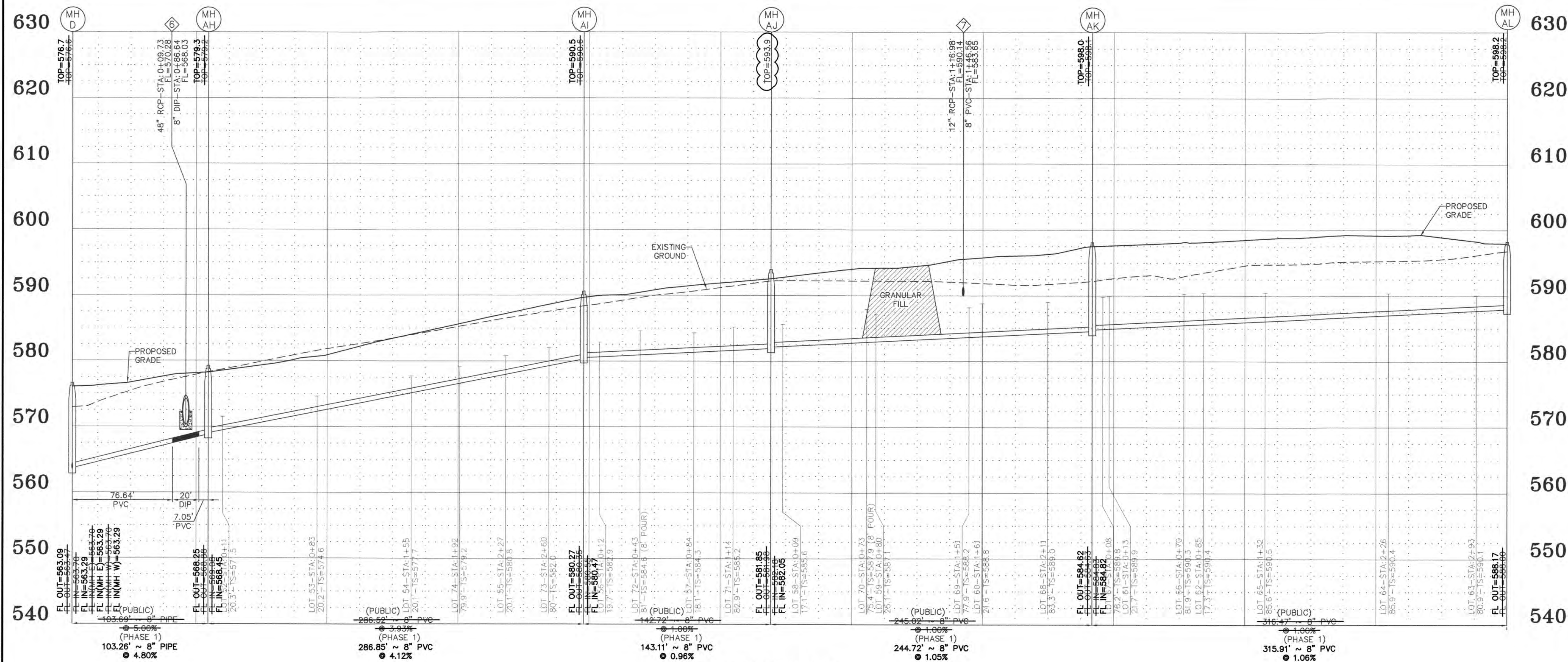
Developer / Owner:
KAPB, L.L.C.
410 CRESTVIEW DRIVE
O'FALLON, MO 63366
636-272-4200

SANITARY SEWER PROFILES

P+Z No.
#27-15.05, 05/11/17

City No.
#CITY

Page No.
20 of 41



- DUCKETT CREEK SANITARY DISTRICT NOTES:**
- EXISTING SANITARY SEWER SERVICE SHALL NOT BE INTERRUPTED.
 - CONSTRUCTION OF SANITARY SEWERS REQUIRES DCSD INSPECTION. CONTACT THE DCSD INSPECTION DEPARTMENT AT 636-441-1244 TO SCHEDULE INSPECTION. 48-HOUR ADVANCE NOTICE IS REQUIRED.
 - LOTS 18, 19, 28, 42, 82, 83, 100 & 101 CONNECTION FEES TO BE PAID AT PHASE 2.


- CITY OF O'FALLON NOTES:**
- ALL SANITARY LATERALS AND SANITARY MAINS THAT CROSS UNDER THE PAVEMENT MUST HAVE PROPER GRANULAR BACKFILL AND REQUIRED COMPACTION.
 - ALL SANITARY SEWER LATERALS SHALL BE A MINIMUM SCHEDULE 40 STORM SEWER STRUCTURES, FROM THE SEWER MAIN TO THE BUILDING, UNLESS THE SEWER DISTRICT HAS A HIGHER MINIMUM AT WHICH THAT MATERIAL SHALL BE USED.

AS-BUILT PUBLIC UTILITY FINAL MEASUREMENTS

THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS.

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

SIGNED: 
 P.E./L.S. DATE: _____



PROJECT TITLE:
LEGENDS POINTE
PHASE ONE
AS-BUILT PLANS
 (formerly THE VILLAGES
 AT RHODES FARM)

ENGINEERING
PLANNING
SURVEYING
 221 Point West Blvd.
 St. Charles, MO 63301
 636-928-5562
 FAX 928-1718



DISCLAIMER OF RESPONSIBILITY
 I hereby certify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

Box Engineering Company, Inc.
 Missouri State Certificate of Authority
 Engineering #00655
 Missouri State Certificate of Authority
 Surveying #00144

REVISIONS

DATE	REVISION
06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

Developer / Owner:
 KAPB, L.L.C.
 410 CRESTVIEW DRIVE
 O'FALLON, MO 63366
 636-272-4200

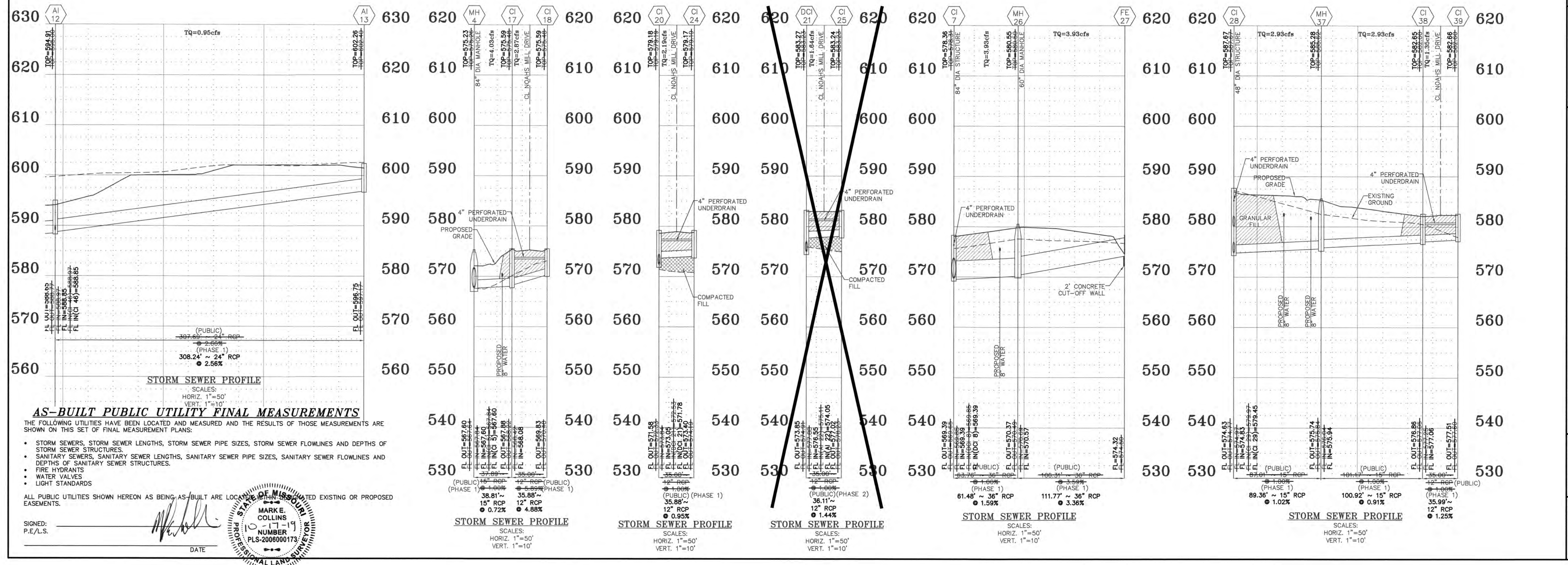
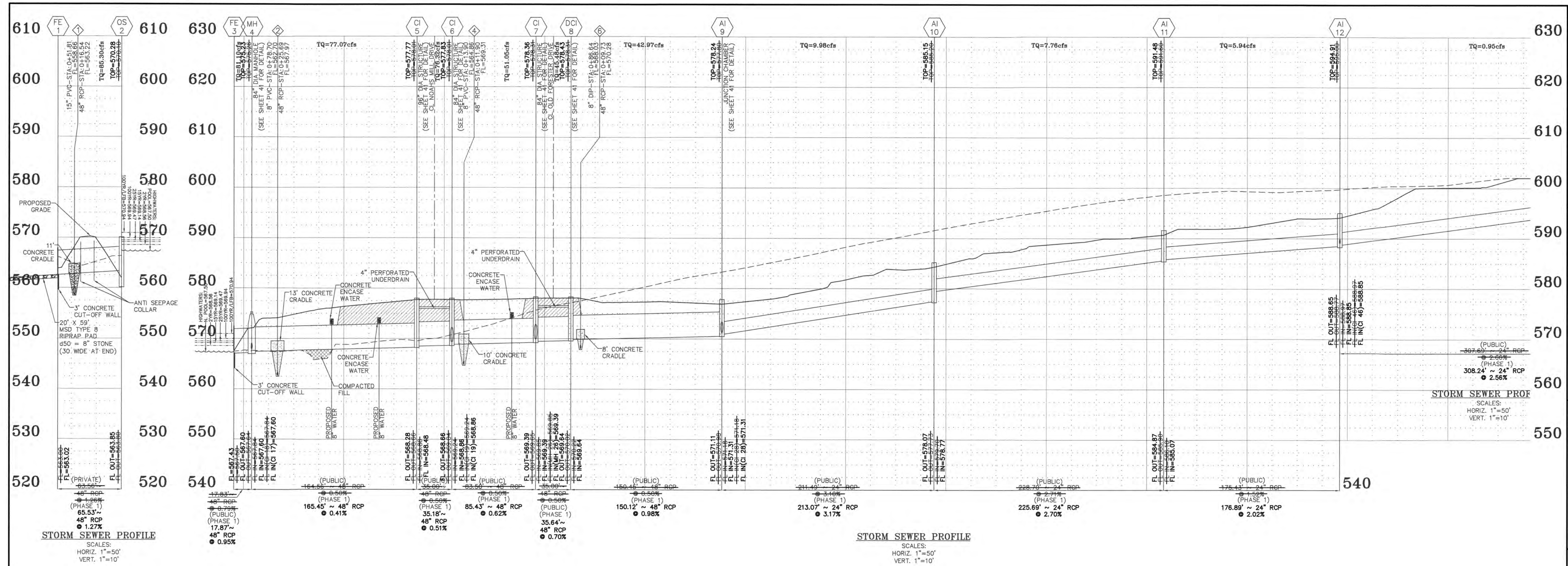
P+Z No.
 #27-15.05.05/11/17

City No.
 #CITY

Page No.
 21 of 41

SANITARY SEWER PROFILES

Box Project # 12-154708 Issue Date: 01/17/2018



AS-BUILT PUBLIC UTILITY FINAL MEASUREMENTS
 THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED AND MEASURED ON EXISTING OR PROPOSED EASEMENTS.

SIGNED: *[Signature]*
 P.E./L.S.
 DATE: _____

STATE OF MISSOURI
 MARK E. COLLINS
 NUMBER 17-19
 PLS-2008000173
 PROFESSIONAL LAND SURVEYOR

PROJECT TITLE:
LEGENDS POINTE PHASE ONE AS-BUILT PLANS
 (formerly THE VILLAGES AT RHODES FARM)

ENGINEERING PLANNING SURVEYING
 221 Point West Blvd.
 St. Charles, MO 63301
 636-928-5552
 FAX 636-928-1718

Disclaimer of Responsibility:
 I hereby certify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

Box Engineering Company, Inc.
 Missouri State Certificate of Authority Engineering #000655
 Missouri State Certificate of Authority Surveying #000144

REVISIONS

06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

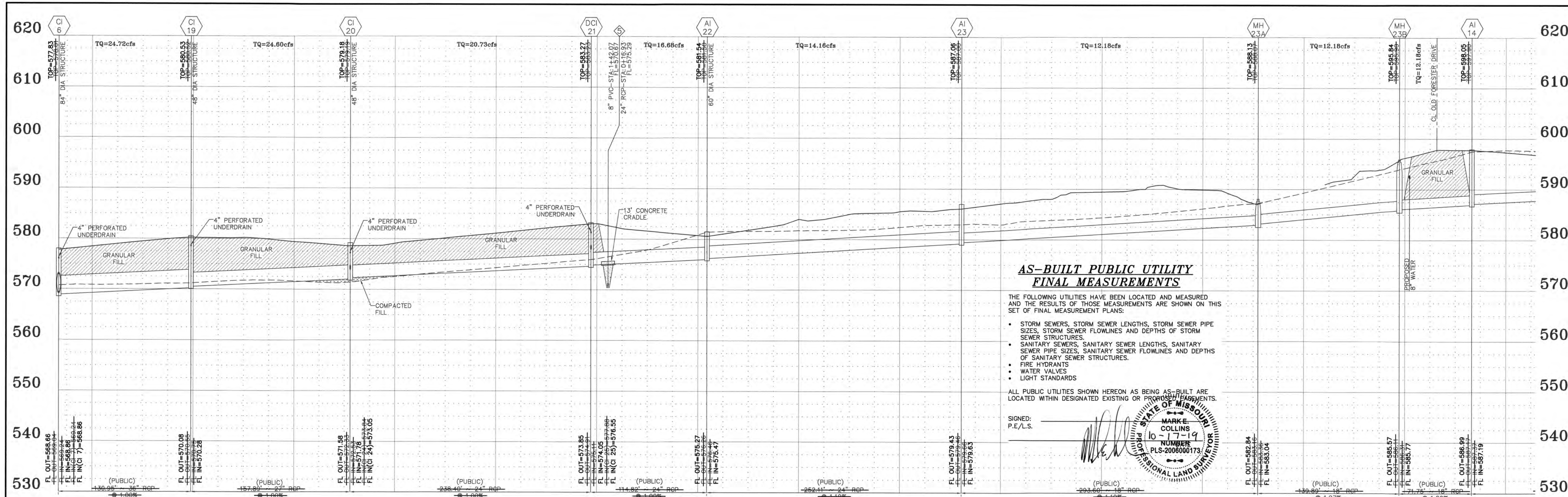
Developer / Owner:
 KAPB, L.L.C.
 410 CRESTVIEW DRIVE
 O'FALLON, MO 63366
 636-272-4200

STORM SEWER PROFILES

P+Z No.
 #27-15.05, 05/11/17

City No.
 #CITY

Page No.
 22 of 41



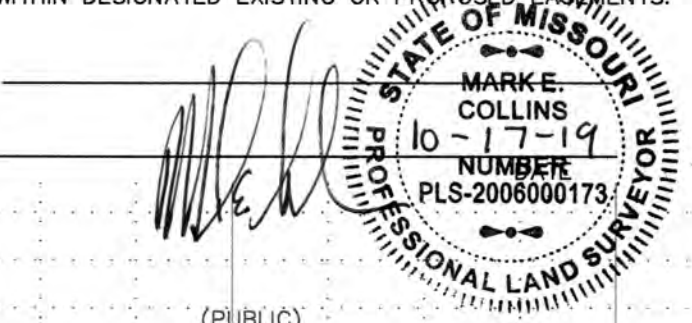
**AS-BUILT PUBLIC UTILITY
FINAL MEASUREMENTS**

THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:

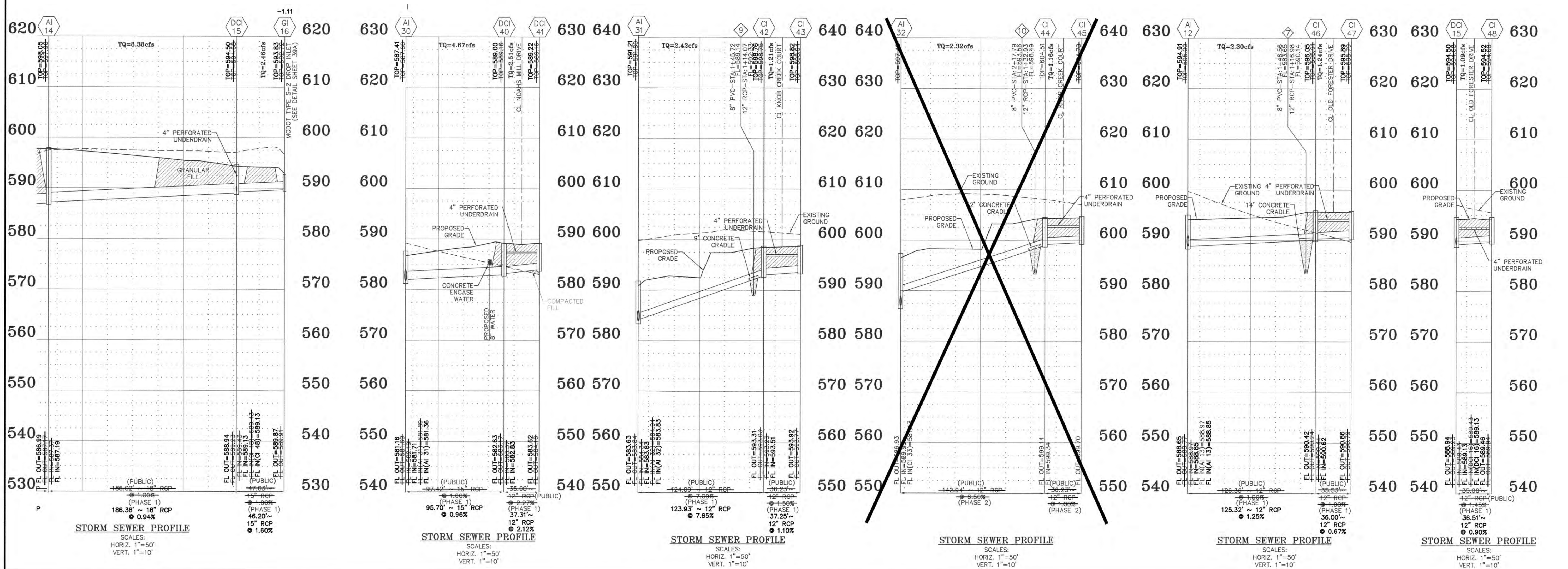
- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED PLANS.

SIGNED: P.E./L.S.



STORM SEWER PROFILE
SCALES:
HORIZ. 1"=50'
VERT. 1"=10'



STORM SEWER PROFILE
SCALES:
HORIZ. 1"=50'
VERT. 1"=10'

STORM SEWER PROFILE
SCALES:
HORIZ. 1"=50'
VERT. 1"=10'

STORM SEWER PROFILE
SCALES:
HORIZ. 1"=50'
VERT. 1"=10'

STORM SEWER PROFILE
SCALES:
HORIZ. 1"=50'
VERT. 1"=10'

STORM SEWER PROFILE
SCALES:
HORIZ. 1"=50'
VERT. 1"=10'

STORM SEWER PROFILE
SCALES:
HORIZ. 1"=50'
VERT. 1"=10'

PROJECT TITLE:
LEGENDS POINTE
PHASE ONE
AS-BUILT PLANS
(formerly THE VILLAGES
AT RHODES FARM)

**ENGINEERING
PLANNING
SURVEYING**
221 Point West Blvd.
St. Charles, MO 63301
636-928-5562
FAX 636-928-1718



DISCLAIMER OF RESPONSIBILITY
I hereby specify that the documents intended to be authenticated by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other Drawings, Specifications, Estimates, Reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

Box Engineering Company, Inc.
Missouri State Certificate of Authority
Engineering #000655
Missouri State Certificate of Authority
Surveying #002144

REVISIONS

06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

Developer / Owner:
KAPB, L.L.C.
410 CRESTVIEW DRIVE
OFALLON, MO 63366
636-272-4200

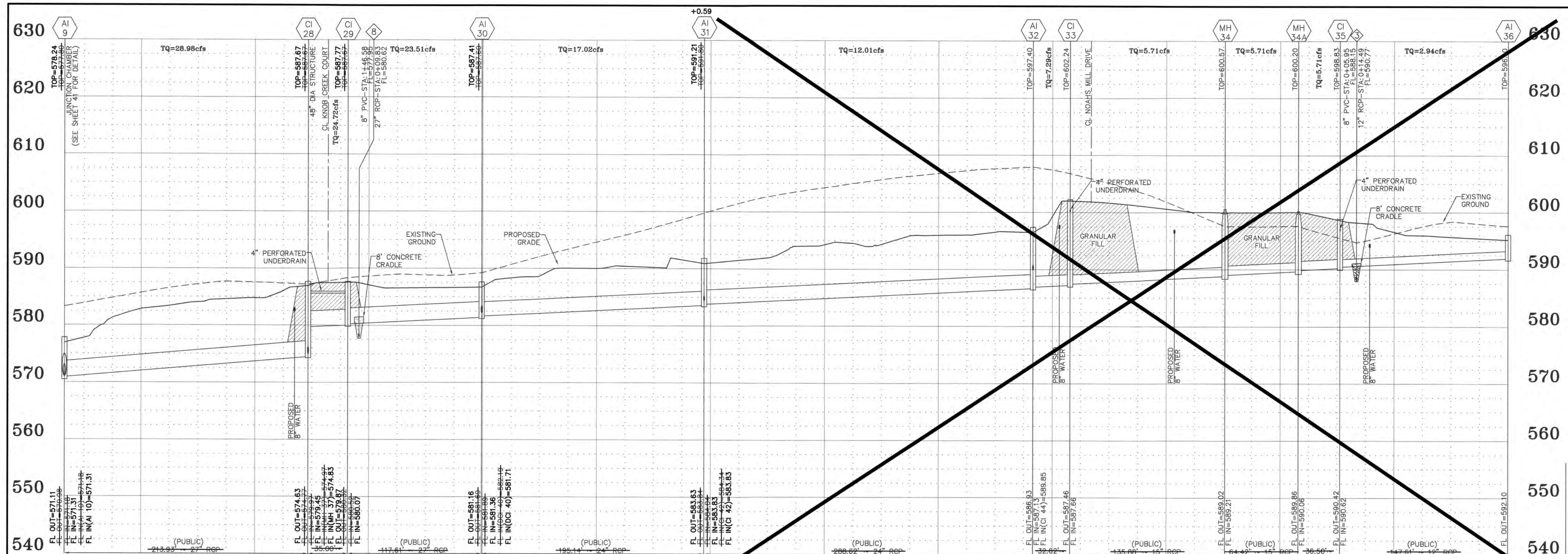
P+Z No.
#27-15.05, 05/11/17

City No.
#CITY

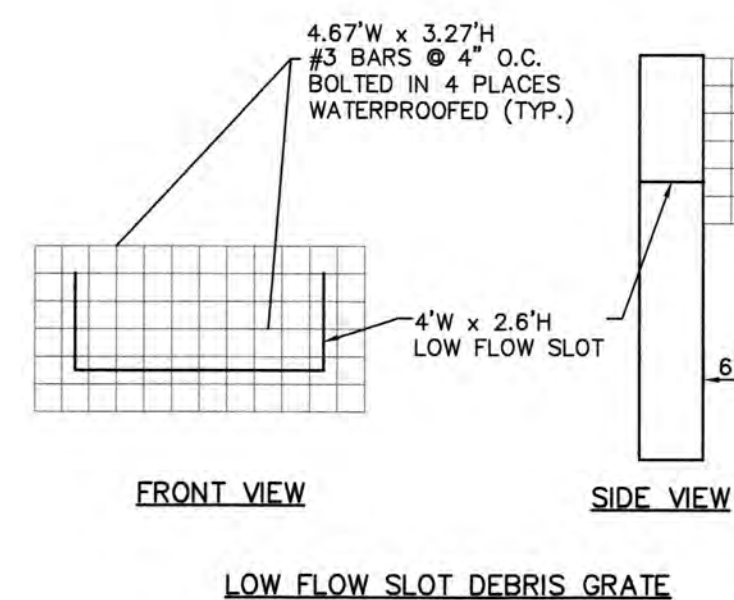
Page No.
23 of 41

STORM SEWER PROFILES

Box Project # 12-154708 Issue Date: 01/17/2018

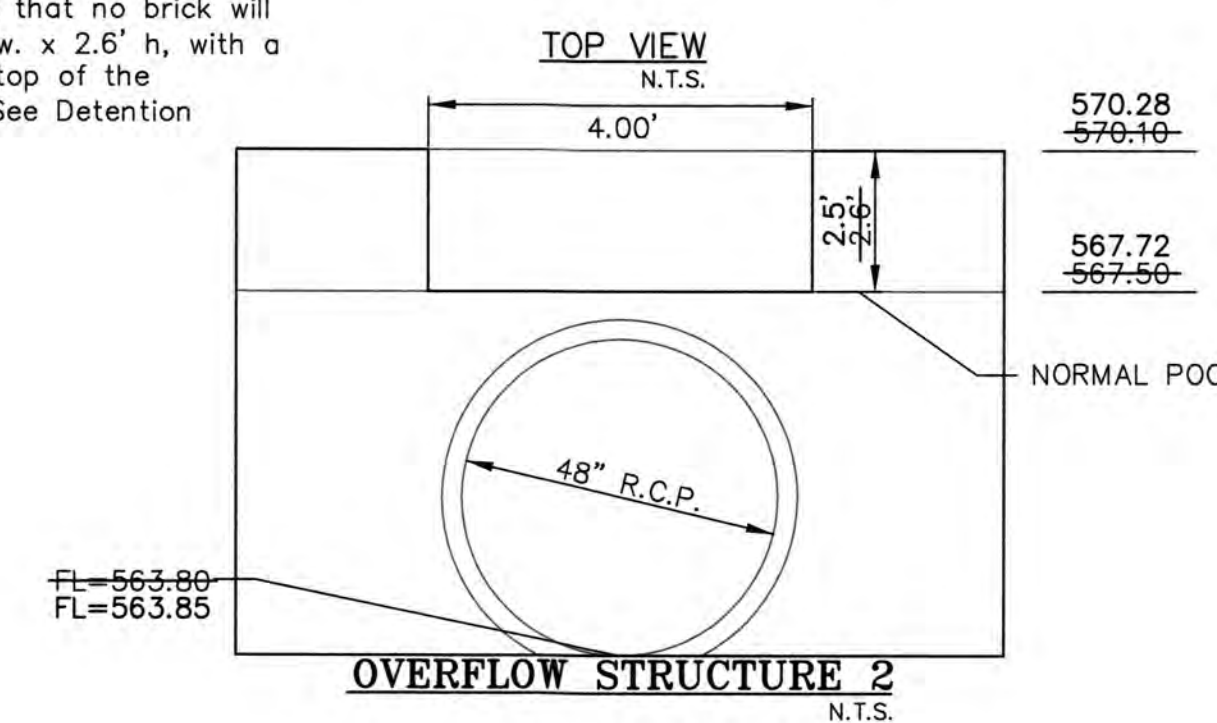


STORM SEWER PROFILE
 SCALES:
 HORIZ. 1"=50'
 VERT. 1"=10'

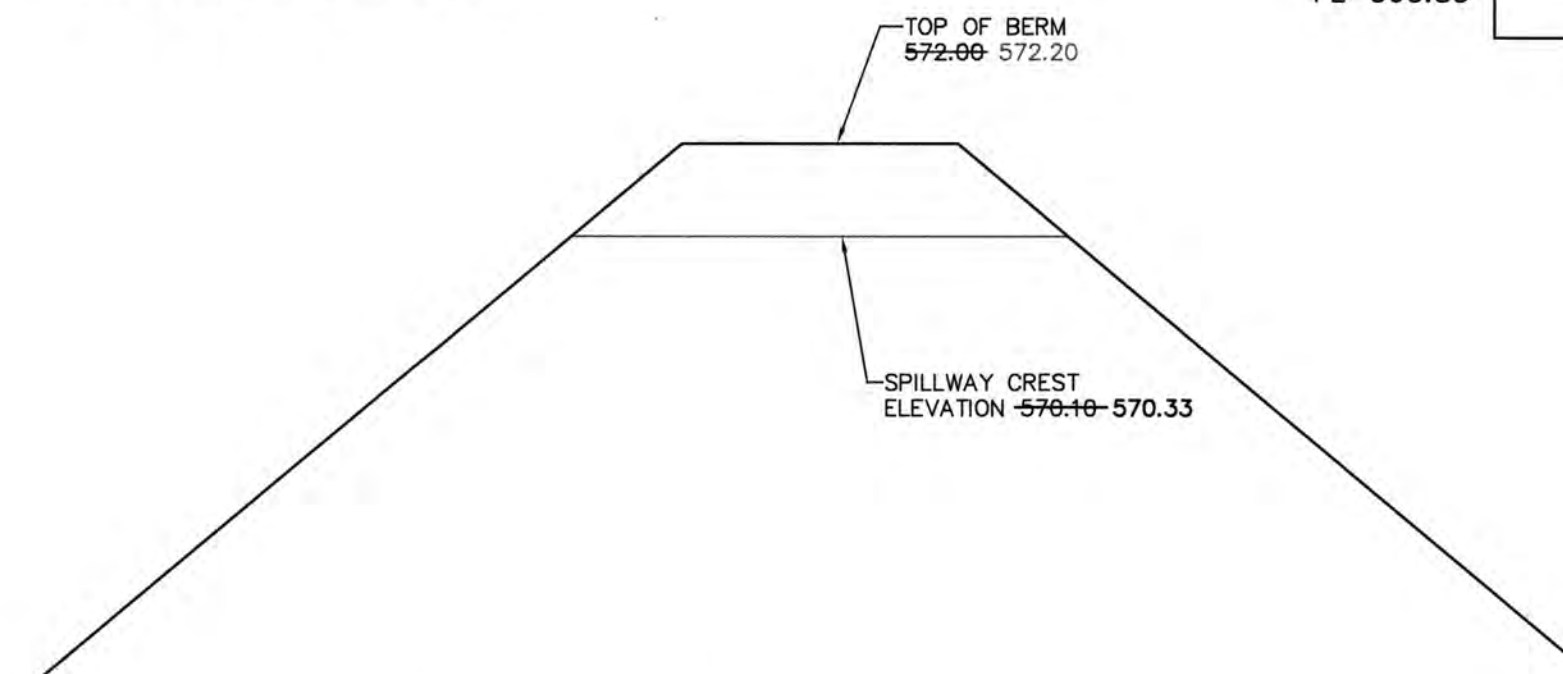


LOW FLOW SLOT DEBRIS GRATE

The Overflow Structure is to be a Standard Double Untrapped Street Inlet Precast Concrete (without top). See M.S.D. Detail 37. The bottom must be constructed to the correct height so that no brick will be used. A rectangular orifice 4.00'w. x 2.6' h, with a flowline of 567.50' will be used. The top of the structure will have a crest=570.10' (See Detention Calculations)



OVERFLOW STRUCTURE 2
 N.T.S.
 2 YR, 20 MIN HW = 568.56 568.83
 15 YR, 20 MIN HW = 569.14 569.44
 25 YR, 20 MIN HW = 569.49 569.77
 100 YR, 20 MIN HW = 569.94 570.24
 100 YR, 20 MIN LFB HW = 570.94 571.10
 NORMAL POOL = 567.50 567.72



IRREGULAR EMERGENCY SPILLWAY
 N.T.S.

NOTE: SEE AS BUILT PLANS FOR SPOT ELEVATIONS.

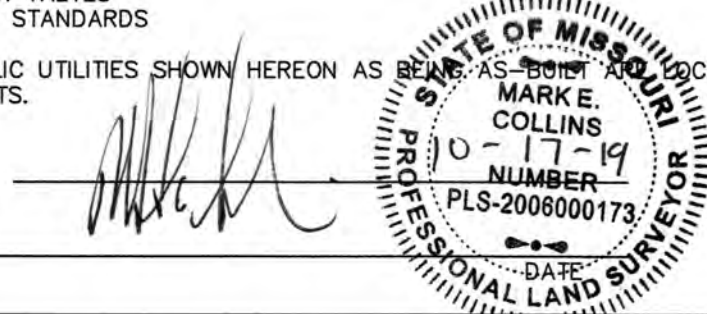
AS-BUILT PUBLIC UTILITY FINAL MEASUREMENTS

THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS. ALL UTILITIES NOT SHOWN HEREON ARE INDICATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

SIGNED:
 P.E./L.S.



PROJECT TITLE:
LEGENDS POINTE
PHASE ONE
AS-BUILT PLANS
 (formerly THE VILLAGES
 AT RHODES FARM)

ENGINEERING
PLANNING
SURVEYING

221 Point West Blvd. #3301
 St. Charles, MO 63301
 636-999-6552
 FAX 636-999-1716



DISCLAIMER OF RESPONSIBILITY
 I hereby specify that the documents intended to be authenticated by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other Drawings, Specifications, Estimates, Reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

Box Engineering Company, Inc.
 Missouri State Certificate of Authority
 Engineering #000655
 Missouri State Certificate of Authority
 Surveying #000144

REVISIONS

DATE	REVISION
06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

Developer / Owner:
 KAPB, L.L.C.
 410 CRESTVIEW DRIVE
 O'FALLON, MO 63366
 636-272-4200

STORM SEWER PROFILES

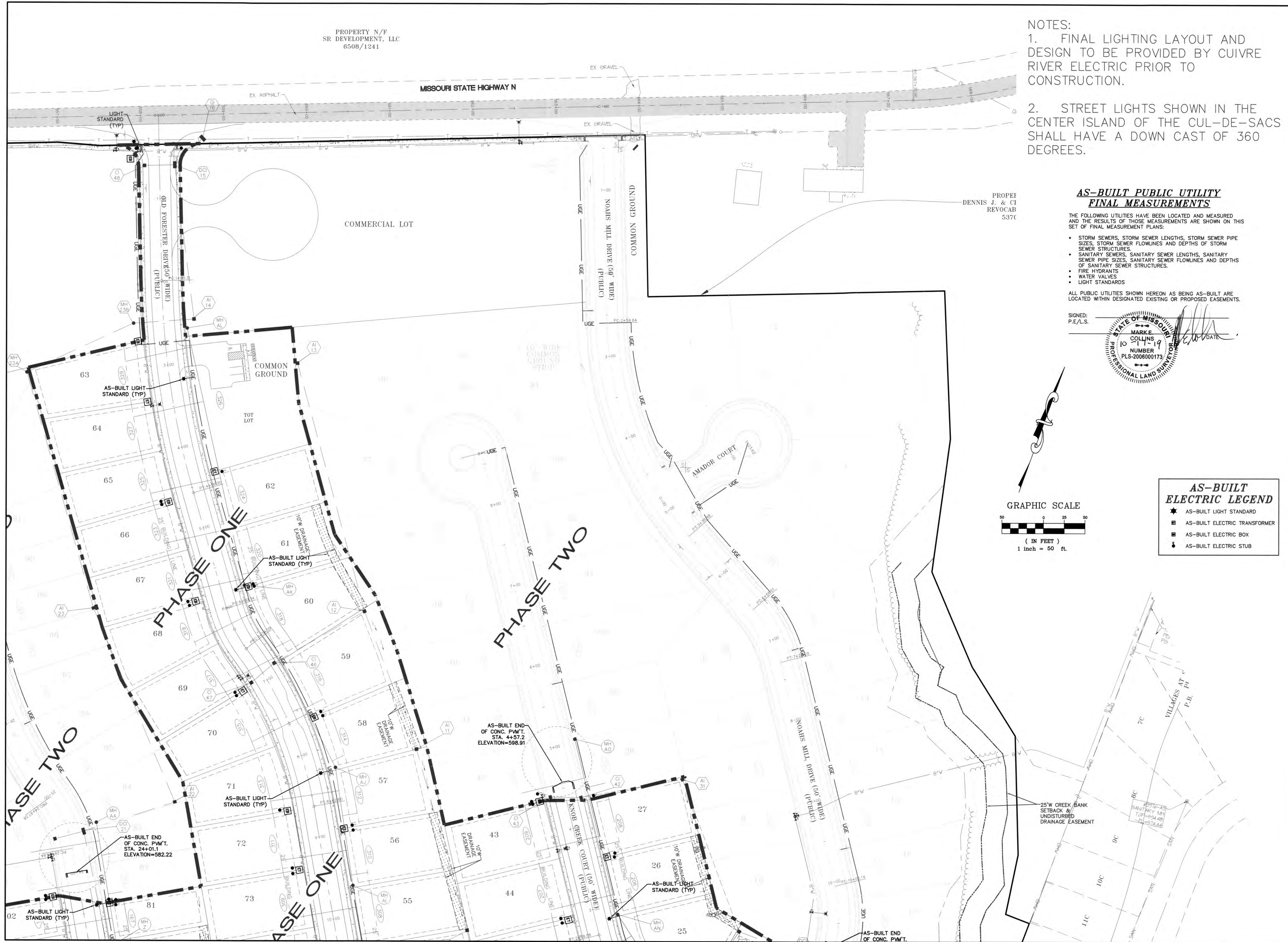
P+Z No.
 #27-15.05, 05/11/17

City No.
 #CITY

Page No.
 24 of 41

PROPERTY N/F
SR DEVELOPMENT, LLC
6508/1241

MISSOURI STATE HIGHWAY N



NOTES:

1. FINAL LIGHTING LAYOUT AND DESIGN TO BE PROVIDED BY CUIVRE RIVER ELECTRIC PRIOR TO CONSTRUCTION.
2. STREET LIGHTS SHOWN IN THE CENTER ISLAND OF THE CUL-DE-SACS SHALL HAVE A DOWN CAST OF 360 DEGREES.

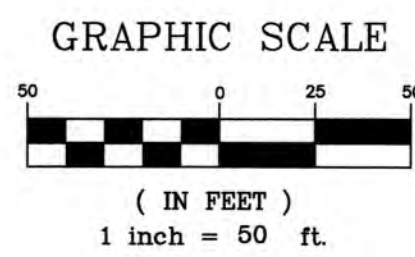
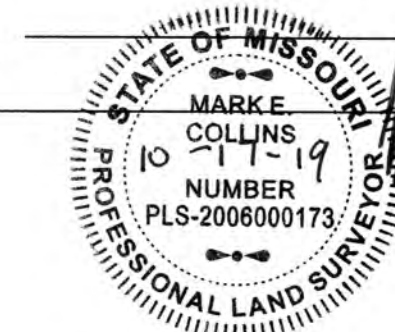
**AS-BUILT PUBLIC UTILITY
FINAL MEASUREMENTS**

THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

SIGNED:
P.E./L.S.



**AS-BUILT
ELECTRIC LEGEND**

- ★ AS-BUILT LIGHT STANDARD
- AS-BUILT ELECTRIC TRANSFORMER
- AS-BUILT ELECTRIC BOX
- ⌋ AS-BUILT ELECTRIC STUB

PROJECT TITLE:
**LEGENDS POINTE
PHASE ONE
AS-BUILT PLANS**
(formerly THE VILLAGES
AT RHODES FARM)



DISCLAIMER OF RESPONSIBILITY
I hereby specify that the documents intended to be authenticated by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

Box Engineering Company, Inc.
Missouri State Certificate of Authority
Engineering #000655
Missouri State Certificate of Authority
Surveying #000144

REVISIONS	
06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

Developer / Owner:
KAPB, L.L.C.
410 CRESTVIEW DRIVE
O'FALLON, MO 63366
636-272-4200

P+Z No.
#27-15.05, 05/11/17

City No.
#CITY

Page No.
31 of 41

LIGHTING PLAN

Box Project # 12-155708 Issue Date: 01/17/2018

AS-BUILT ELECTRIC LEGEND

- ★ AS-BUILT LIGHT STANDARD
- AS-BUILT ELECTRIC TRANSFORMER
- AS-BUILT ELECTRIC BOX
- ⊙ AS-BUILT ELECTRIC STUB

PROPERTY N/F
SR DEVELOPMENT, LLC
6508/1241

PROJECT TITLE:
**LEGENDS POINTE
PHASE ONE
AS-BUILT PLANS**
(formerly THE VILLAGES
AT RHODES FARM)

**ENGINEERING
PLANNING
SURVEYING**
221 Point West Blvd.
St. Charles, MO 63301
636-628-5562
FAX 636-928-1718



DISCLAIMER OF RESPONSIBILITY
I hereby specify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other Drawings, Specifications, Estimates, Reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

Box Engineering Company, Inc. Authority
Missouri State Certificate of Authority
Engineering #000655
Missouri State Certificate of Authority
Surveying #000144

REVISIONS

06/20/18	CITY COMMENT REVS.
06/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

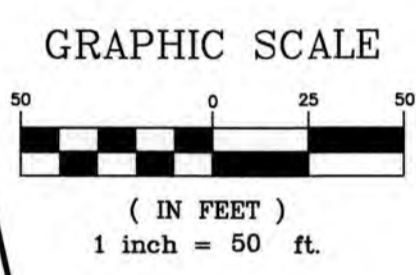
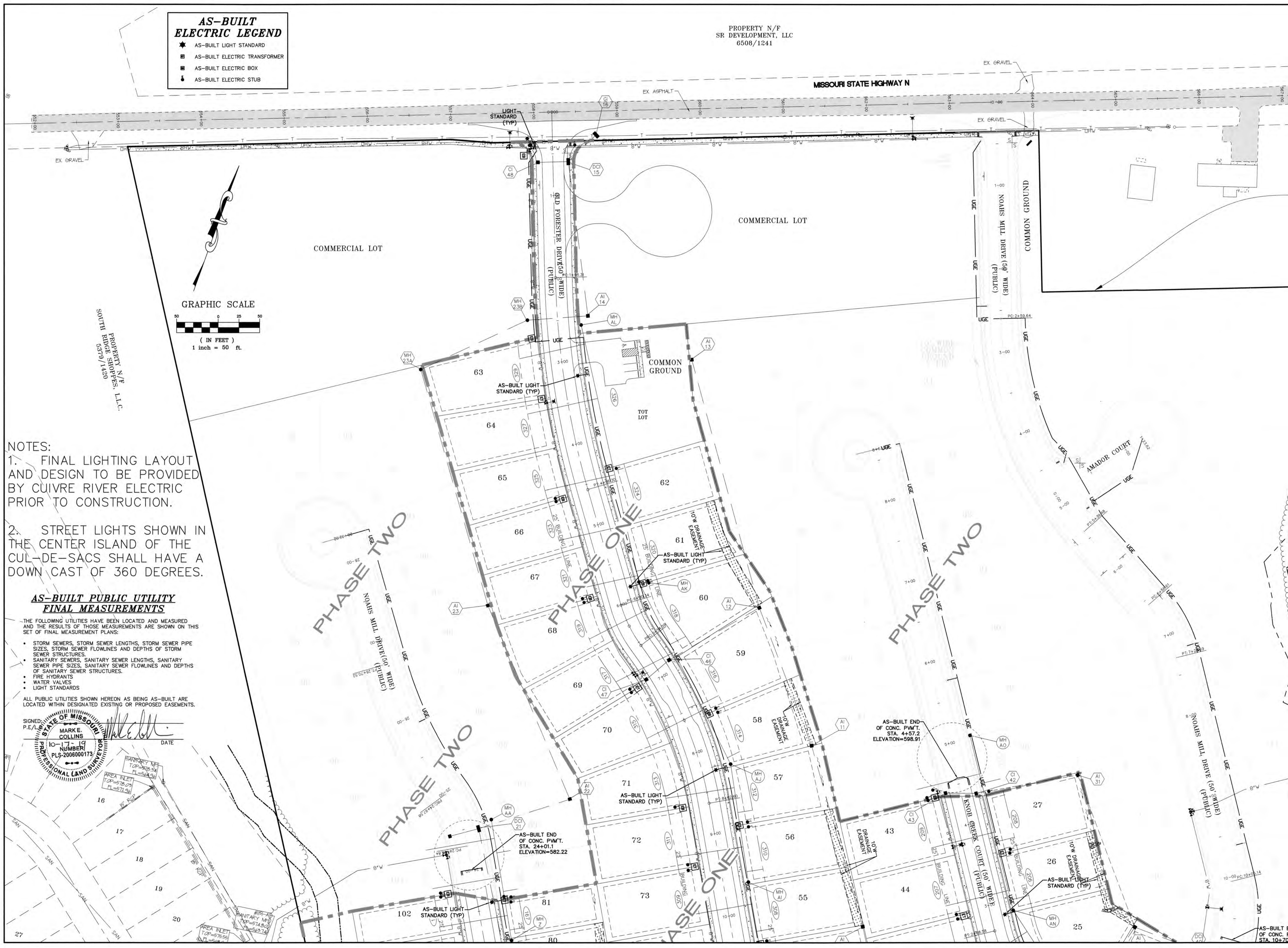
Developer / Owner:
KAPB, L.L.C.
410 CRESTVIEW DRIVE
O'FALLON, MO 63366
636-272-4200

P+Z No.
#27-15.05, 05/11/17

City No.
#CITY

Page No.
32 of 41

LIGHTING PLAN

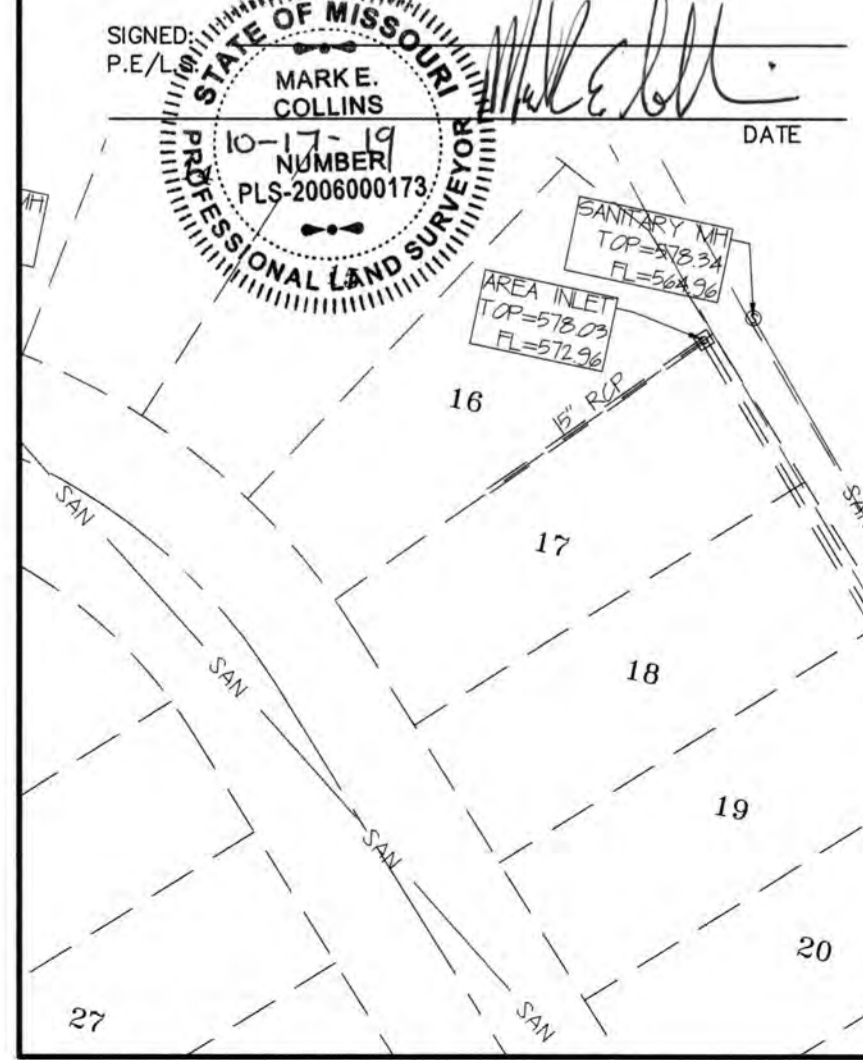


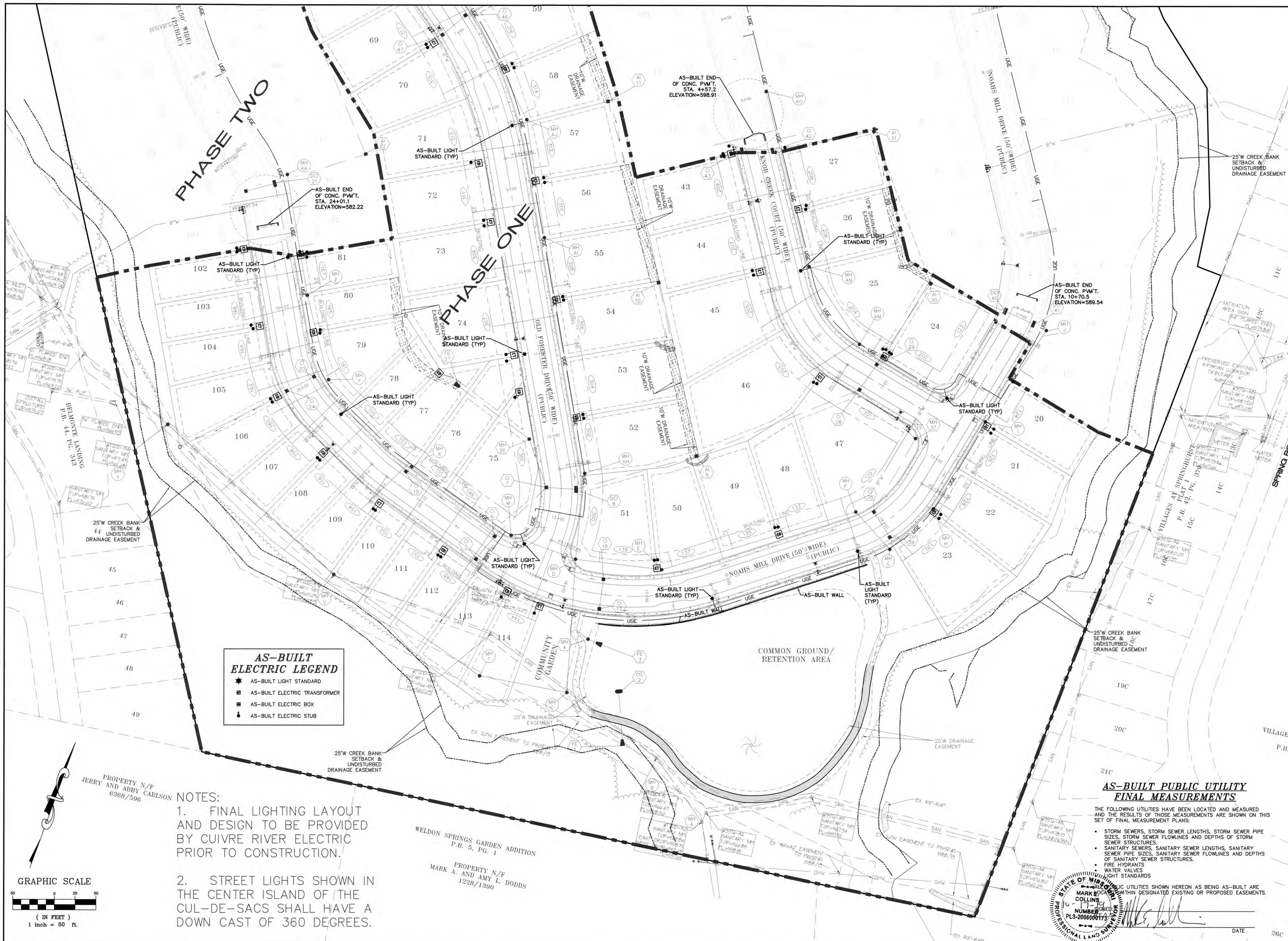
- NOTES:**
- FINAL LIGHTING LAYOUT AND DESIGN TO BE PROVIDED BY CUIVRE RIVER ELECTRIC PRIOR TO CONSTRUCTION.
 - STREET LIGHTS SHOWN IN THE CENTER ISLAND OF THE CUL-DE-SACS SHALL HAVE A DOWN CAST OF 360 DEGREES.

AS-BUILT PUBLIC UTILITY FINAL MEASUREMENTS

- THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:
- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
 - SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
 - FIRE HYDRANTS
 - WATER VALVES
 - LIGHT STANDARDS
- ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

SIGNED:
P.E. MARK E. COLLINS
STATE OF MISSOURI
PLS-200800173
DATE: _____

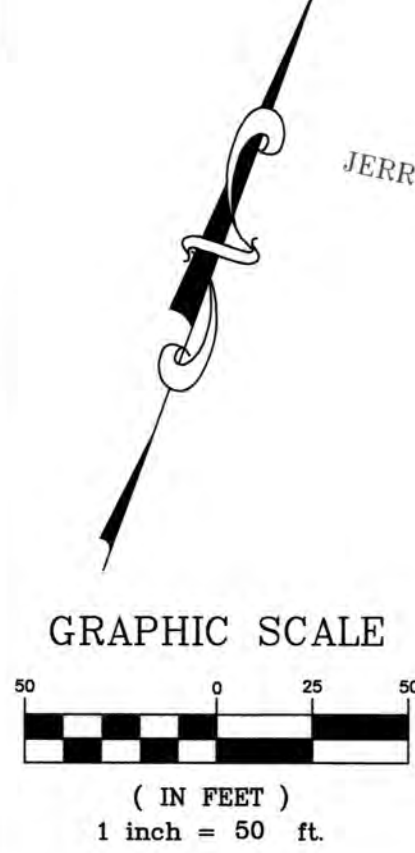




AS-BUILT ELECTRIC LEGEND

- ★ AS-BUILT LIGHT STANDARD
- AS-BUILT ELECTRIC TRANSFORMER
- AS-BUILT ELECTRIC BOX
- ⊥ AS-BUILT ELECTRIC STUB

- NOTES:**
- FINAL LIGHTING LAYOUT AND DESIGN TO BE PROVIDED BY CUIVRE RIVER ELECTRIC PRIOR TO CONSTRUCTION.
 - STREET LIGHTS SHOWN IN THE CENTER ISLAND OF THE CUL-DE-SACS SHALL HAVE A DOWN CAST OF 360 DEGREES.



PROJECT TITLE:
LEGENDS POINTE
PHASE ONE
AS-BUILT PLANS
 (formerly THE VILLAGES AT RHODES FARM)



ENGINEERING PLANNING SURVEYING
 221 Point West Blvd.
 St. Charles, MO 63301
 636-999-5552
 FAX 636-999-1718

Box Engineering Company, Inc.
 Missouri State Certificate of Authority
 Engineering #000655
 Missouri State Certificate of Authority
 Surveying #000144

REVISIONS

DATE	REVISION
06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

Developer / Owner:
 KAPB, L.L.C.
 40 CRESTVIEW DRIVE
 O'FALLON, MO 63366
 636-272-4200

P+Z No.
 #27-15.05, 05/11/17

City No.
 #CITY

Page No.
 33 of 41

AS-BUILT PUBLIC UTILITY FINAL MEASUREMENTS

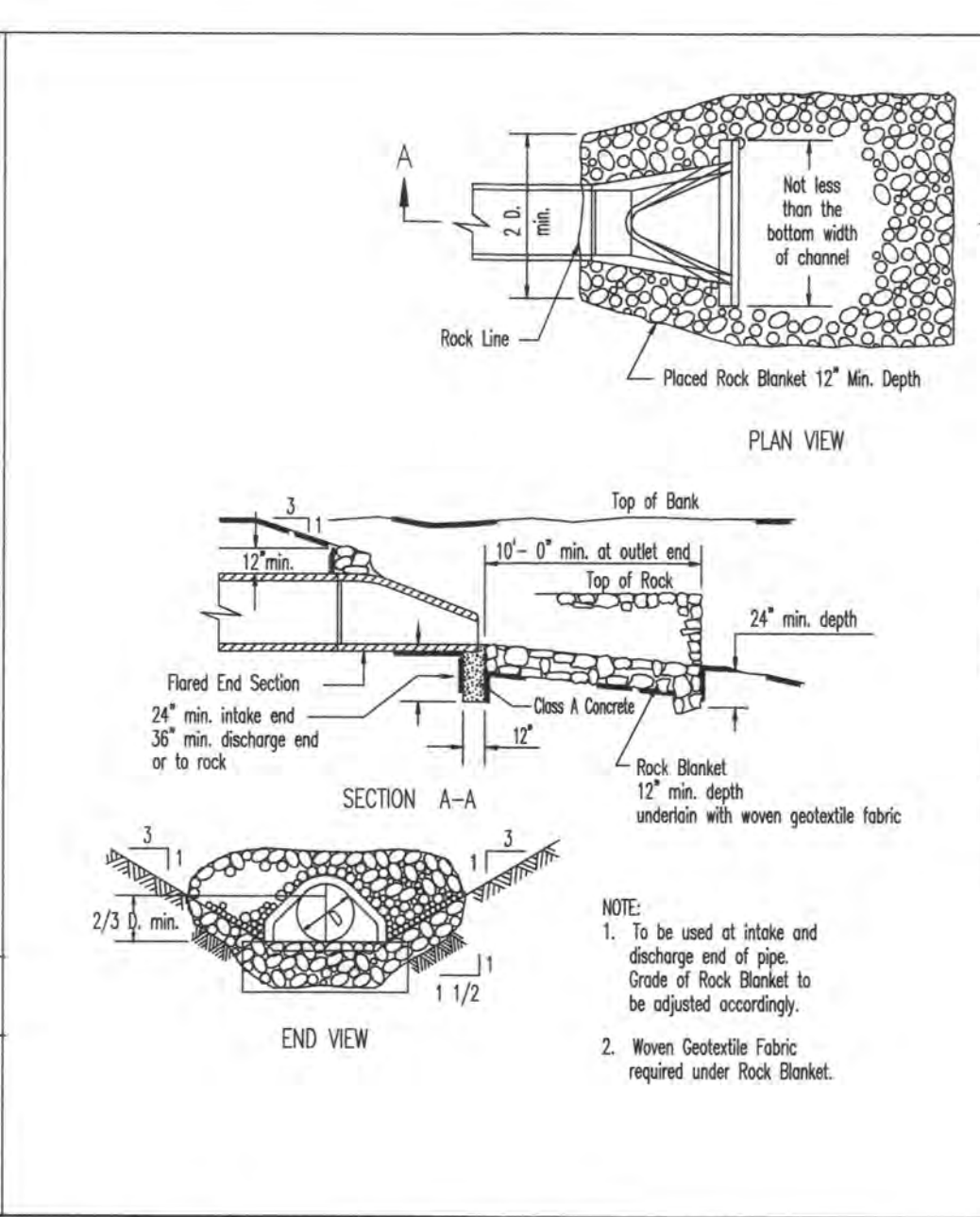
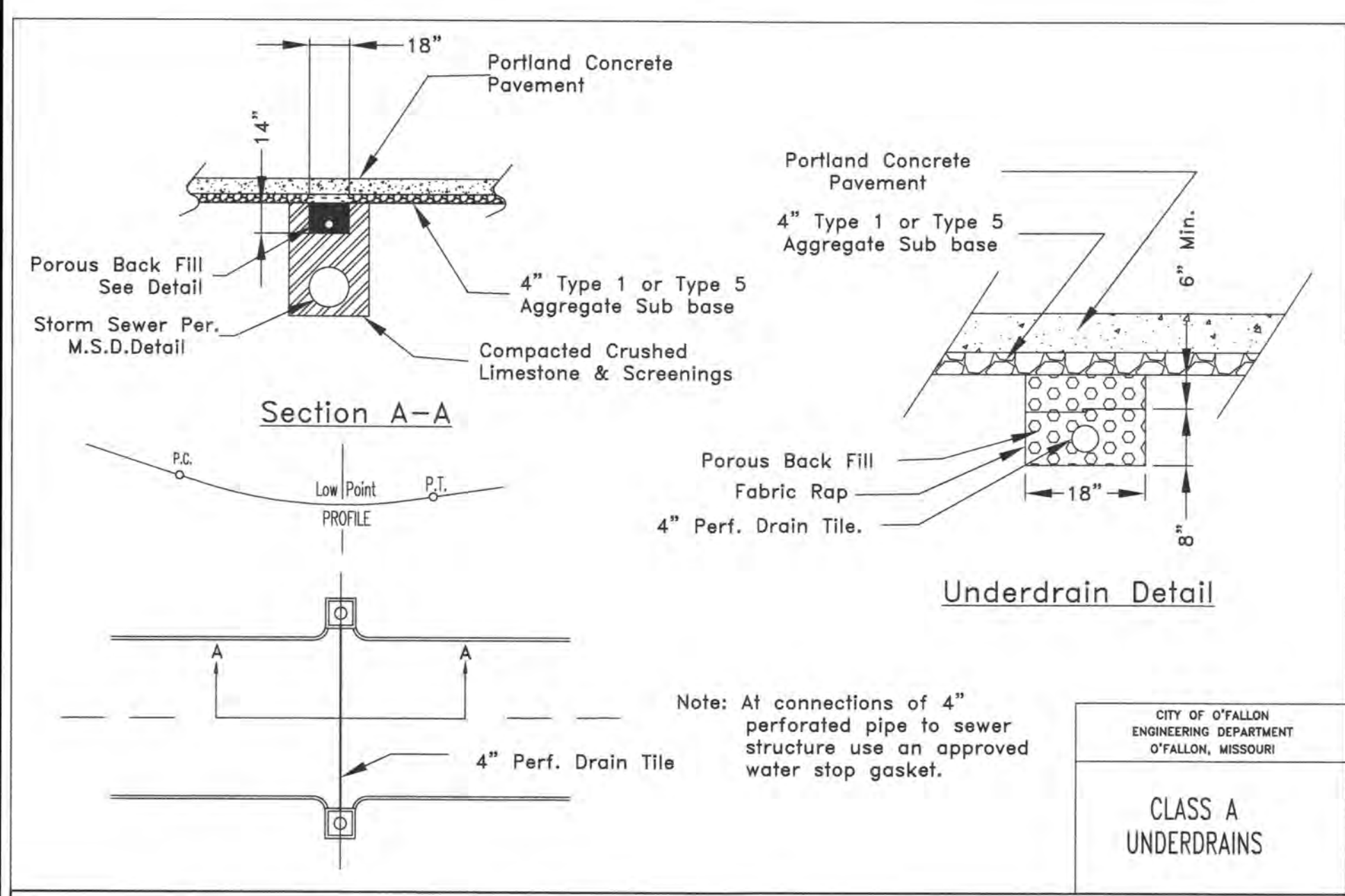
THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE TO BE MAINTAINED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

STATE OF MISSOURI
 MARK COLLINS
 PROFESSIONAL LAND SURVEYOR
 NUMBER 17171
 PLS-2006001717

DATE 26C



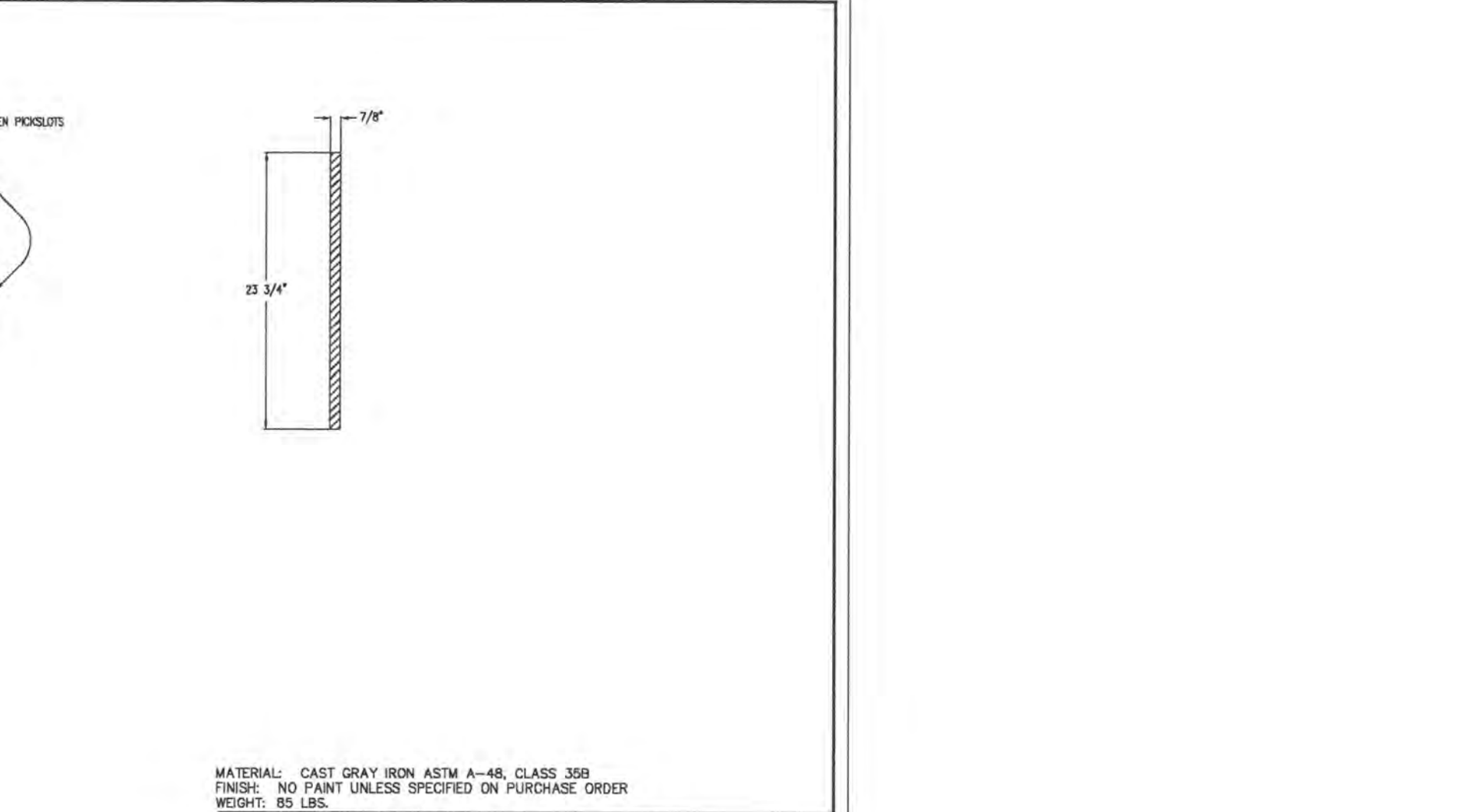
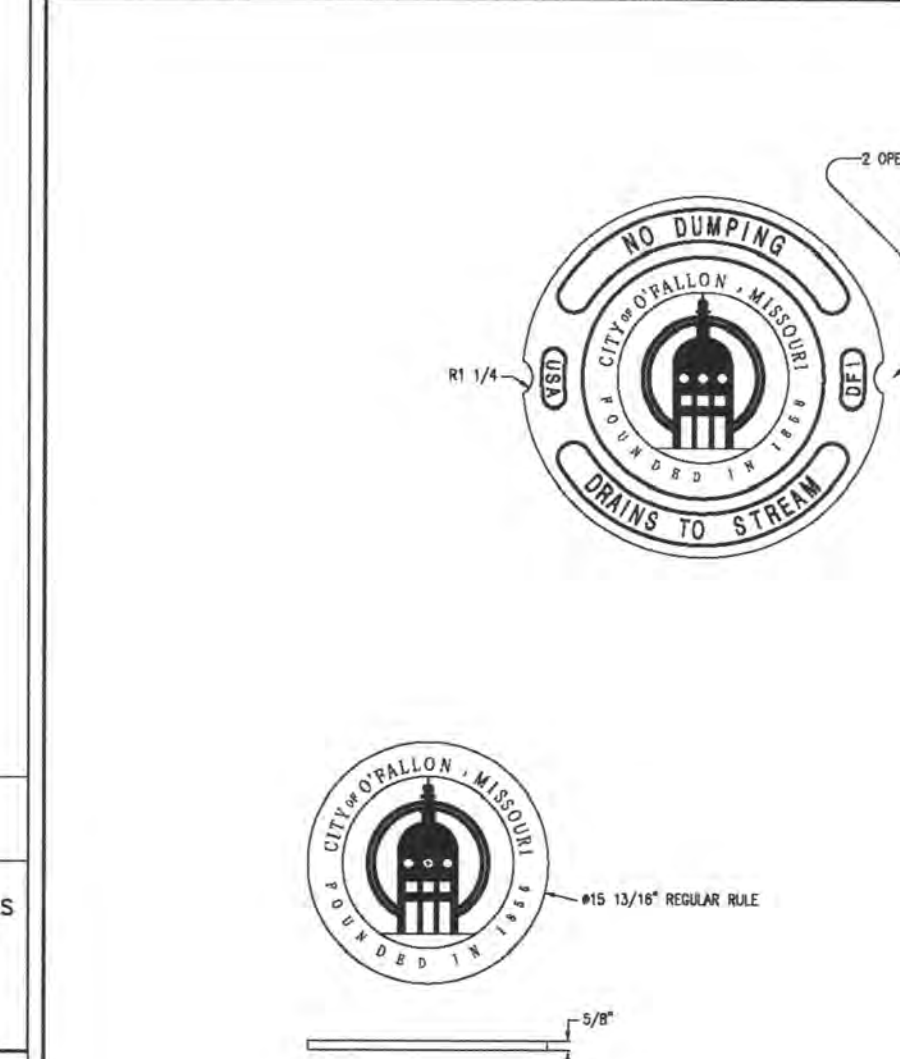
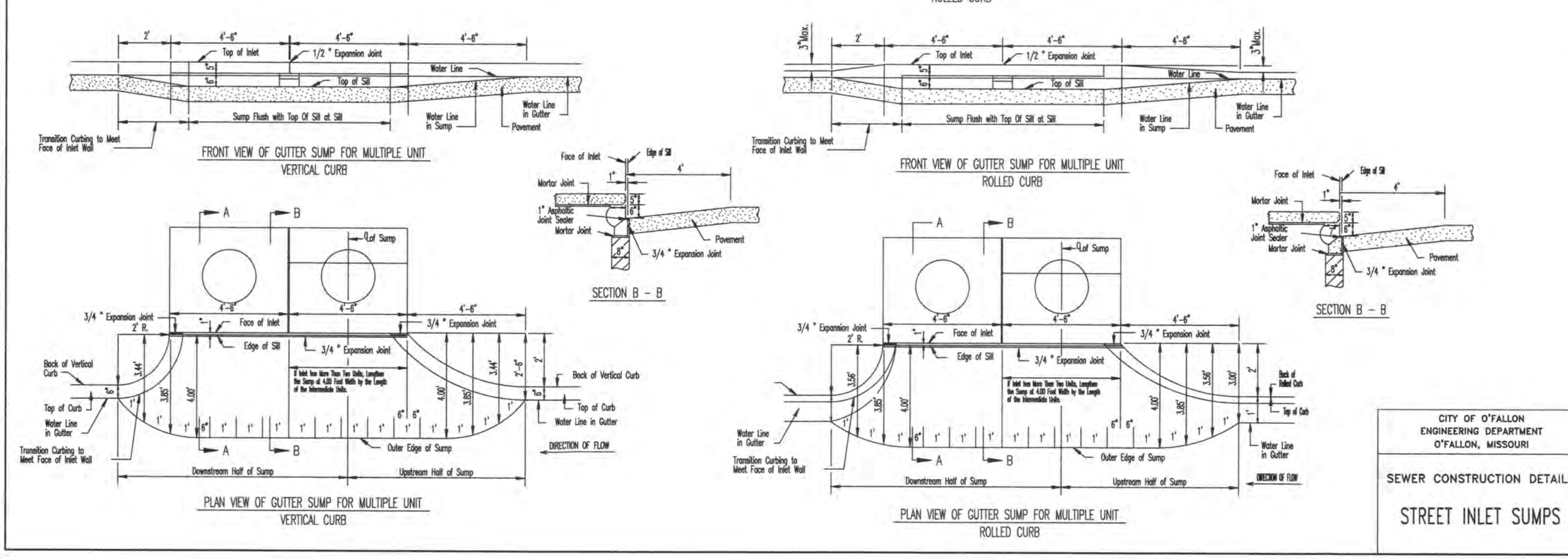
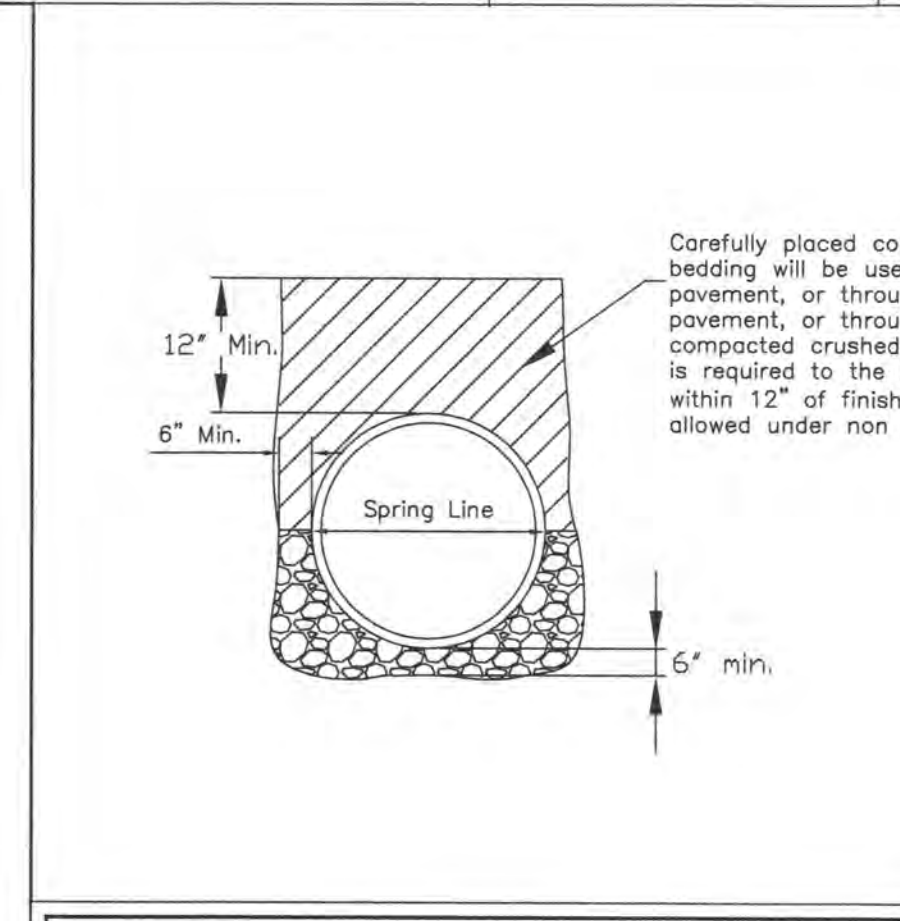
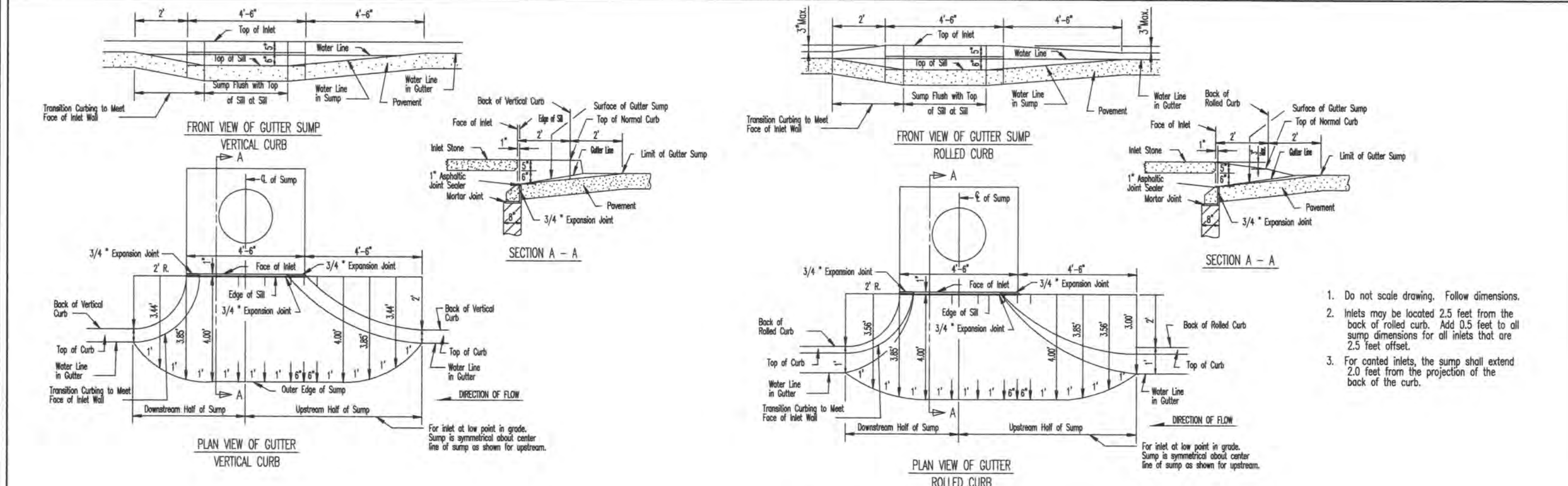
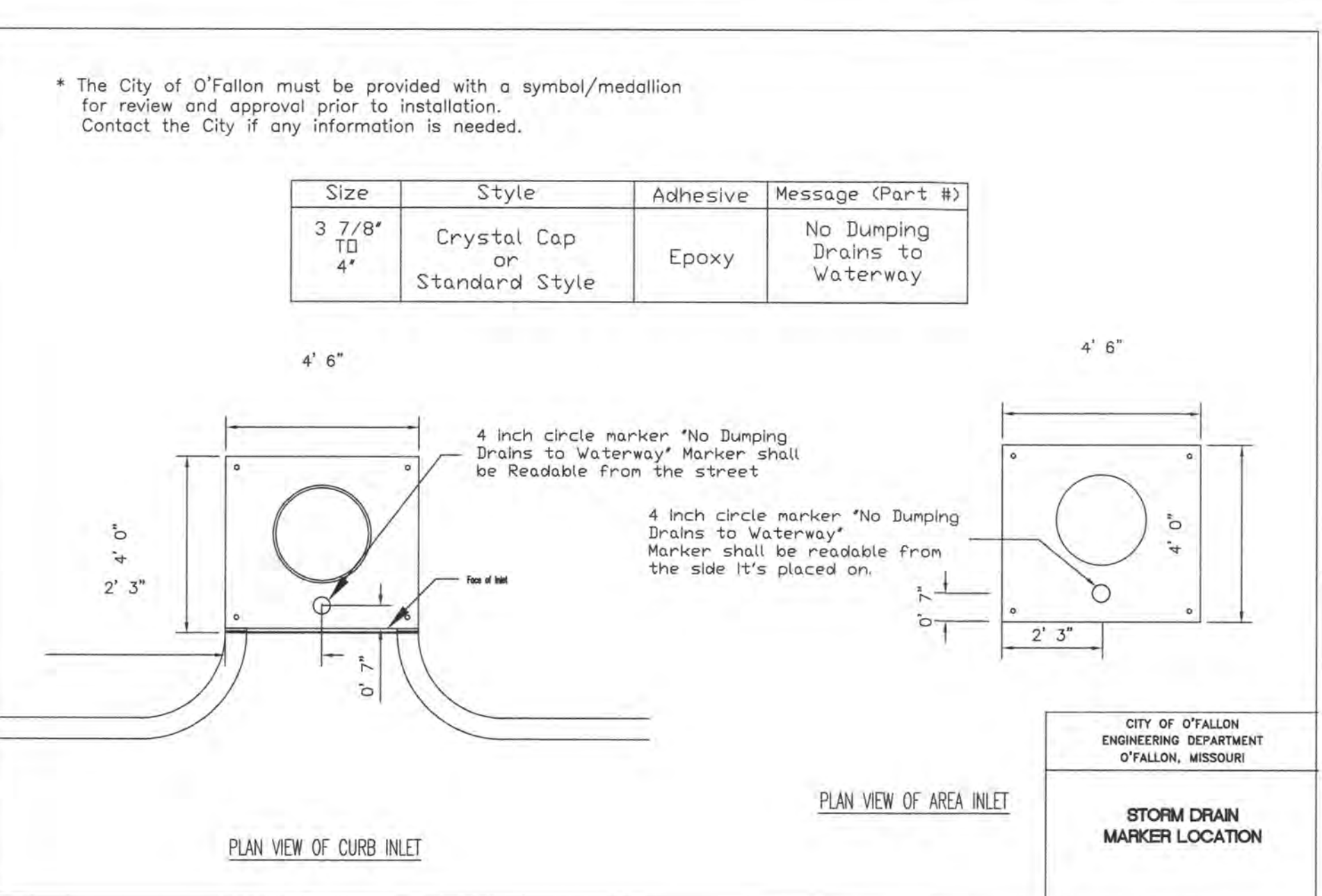
* The discharge point of all flared end sections shall be protected by rip rap or other approved means.

** Rip rap shown at flared end sections will be evaluated in the field by the Engineer, Contractor, and City Inspectors after installation for effectiveness and field modified, if necessary to reduce erosion on and off site.

* The City of O'Fallon must be provided with a symbol/medallion for review and approval prior to installation. Contact the City if any information is needed.

Size	Style	Adhesive	Message (Part #)
3 7/8" TO 4"	Crystal Cap or Standard Style	Epoxy	No Dumping Drains to Waterway

MSD Type 5 Rock Blanket (% By Weight Passing)		
Sieve	Maximum	Minimum
12 inch	90	70
6 inch	30	10
1/2 inch	5	0



AS-BUILT PUBLIC UTILITY FINAL MEASUREMENTS

THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

SIGNED: DATE: _____

ENGINEERS SEAL DOES NOT APPLY TO CITY OF O'FALLON DETAILS ON THIS SHEET.

CITY OF O'FALLON ENGINEERING DEPARTMENT O'FALLON, MISSOURI

SEWER CONSTRUCTION DETAILS FLARED END SECTION (INLET/OUTLET PROTECTION)

STORM SEWER TRENCH DETAIL

STREET INLET SUMPS

MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 350
FINISH: NO PAINT UNLESS SPECIFIED ON PURCHASE ORDER
WEIGHT: 85 LBS.

DR.	REV.	SCALE	TITLE
01	01	1/8"=1'	4580 COVER

NEENAH FOUNDRY
DATE: 11/21/2013
NF-4580-272B

Developer / Owner:
KAPB, L.L.C.
410 CRESTVIEW DRIVE
O'FALLON, MO 63366
636-272-4200

REFERENCE DETAILS

* All other Storm Details will be by M.S.D. 2007 Standards and Specifications.

* A 5/8" Trash bar shall be centered within the opening(s) of all inlets.

PROJECT TITLE:
LEGENDS POINTE PHASE ONE AS-BUILT PLANS (formerly THE VILLAGES AT RHODES FARM)

Box Engineering Company, Inc.
Missouri State Certificate of Authority Engineering #000655
Missouri State Certificate of Authority Surveying #000144

221 Point West Blvd.
St. Charles, MO 63301
636-498-6552
FAX 636-498-1718

REVISIONS

DATE	REVISION
06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

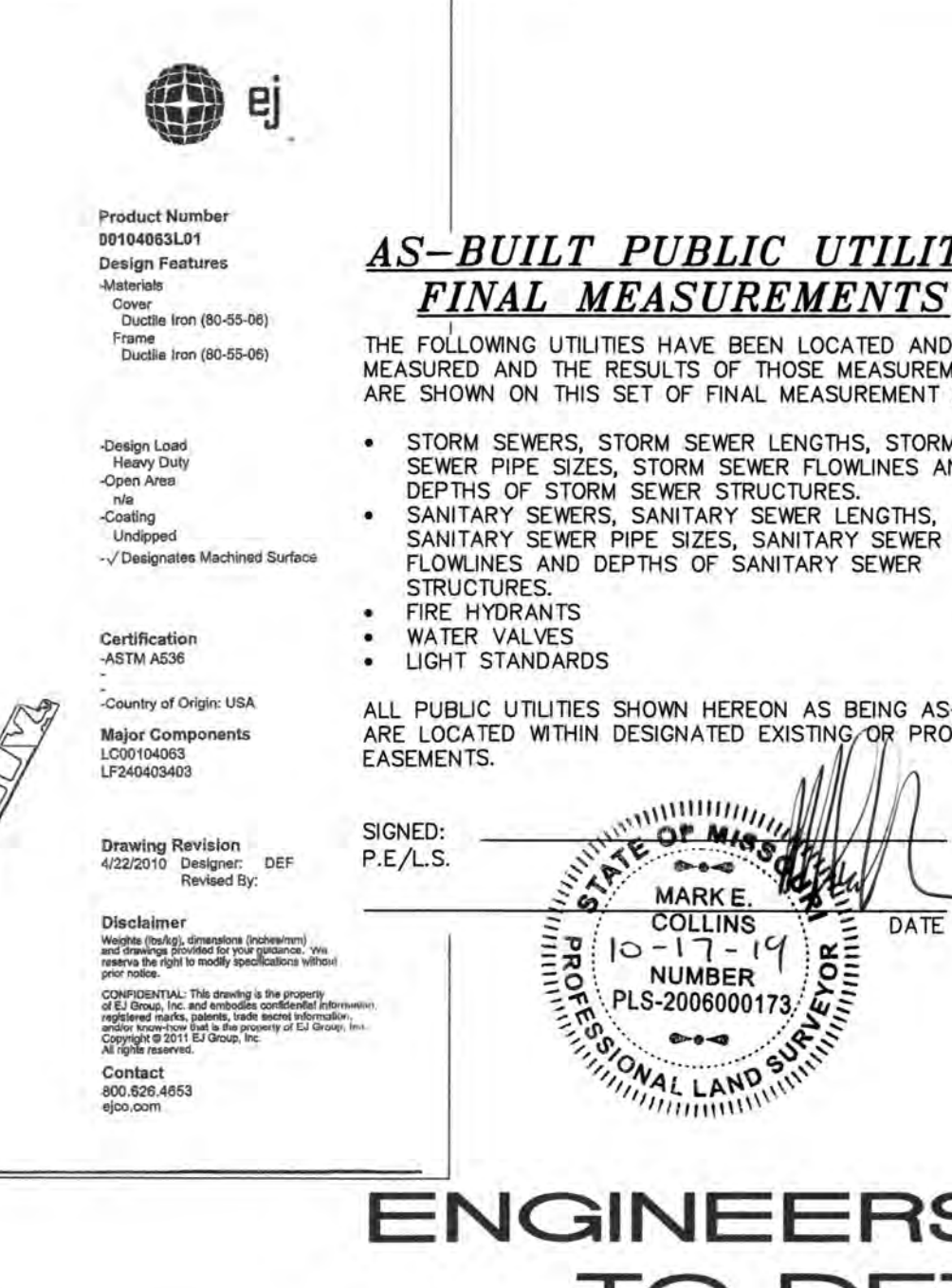
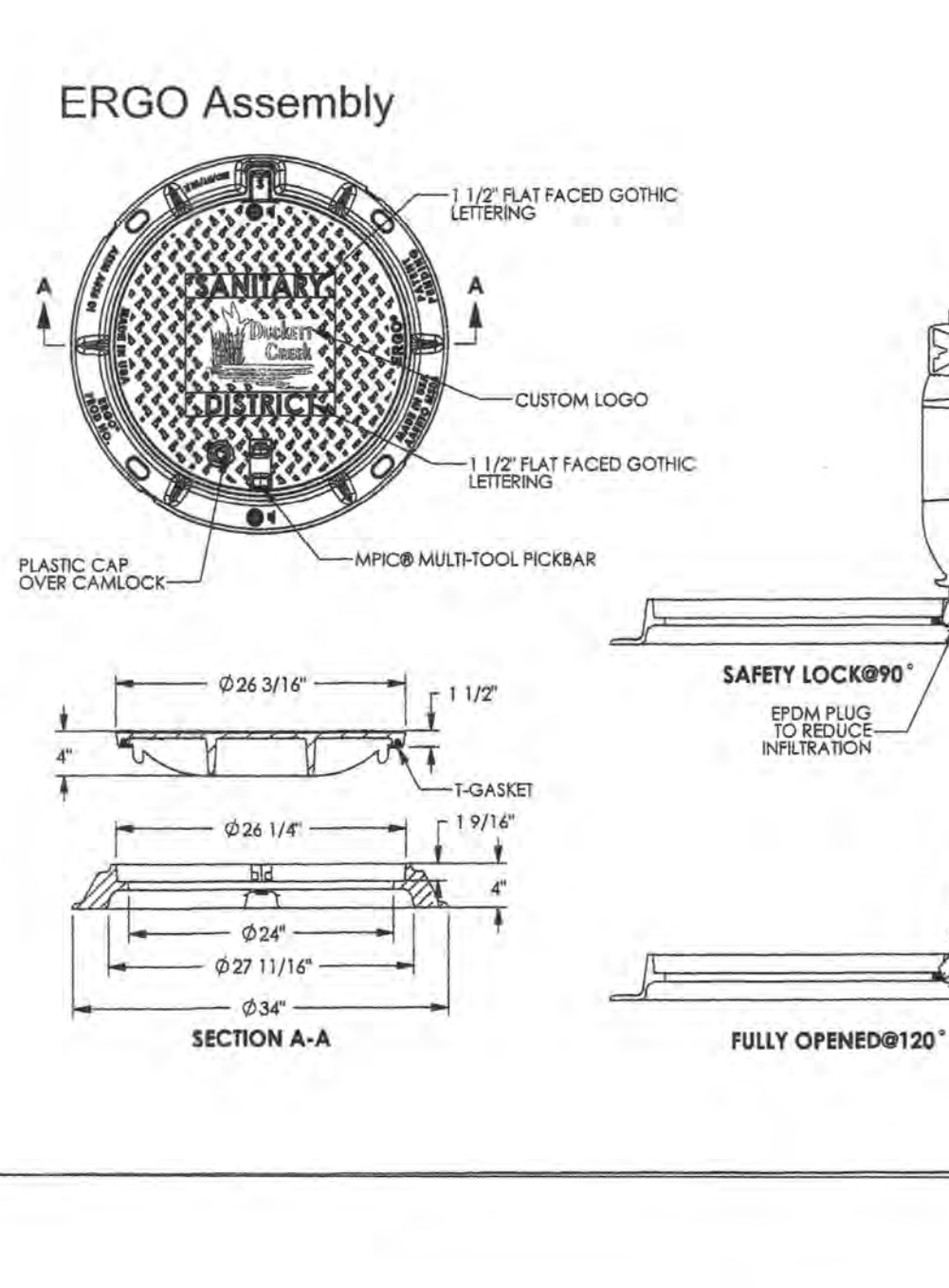
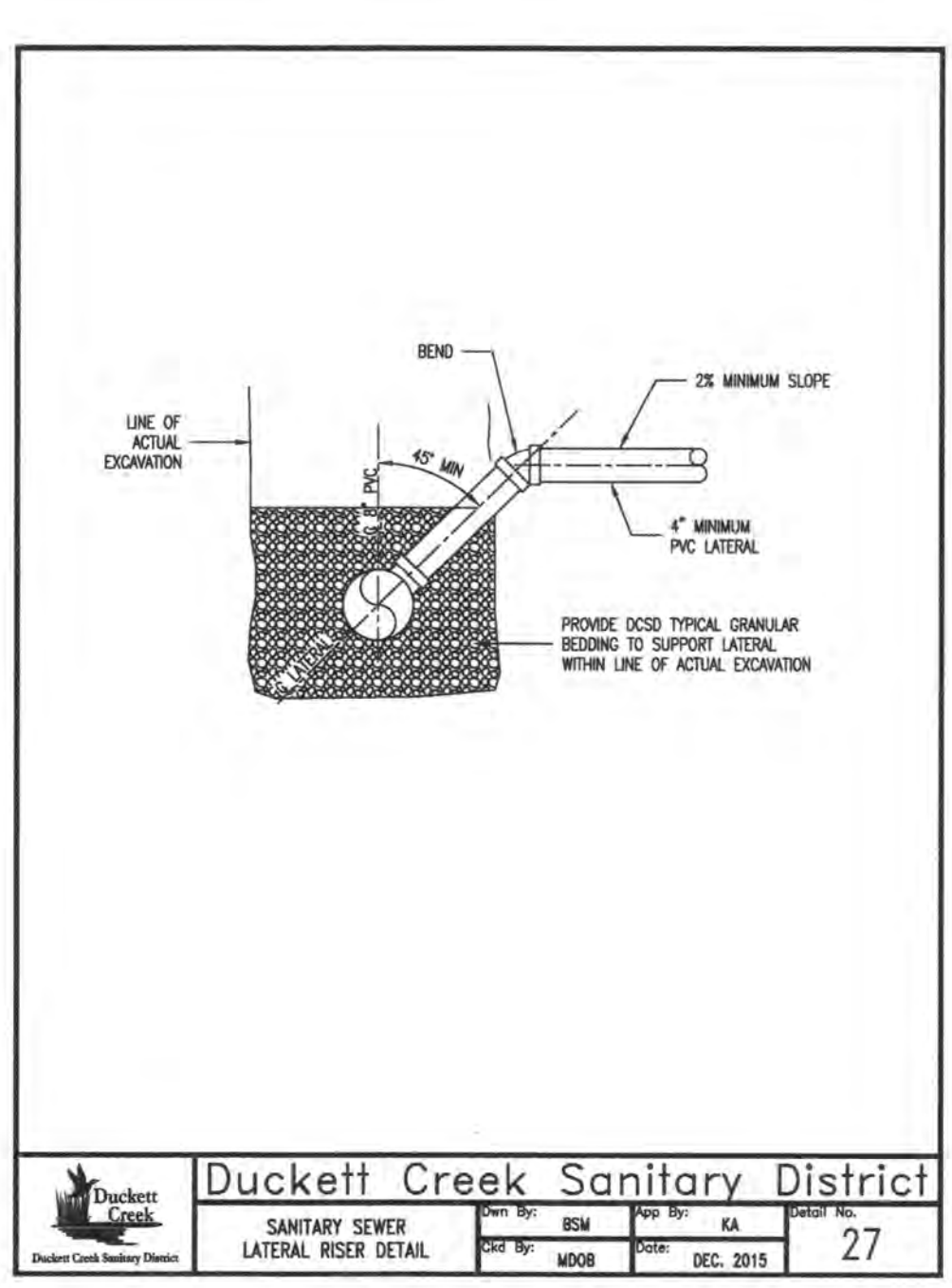
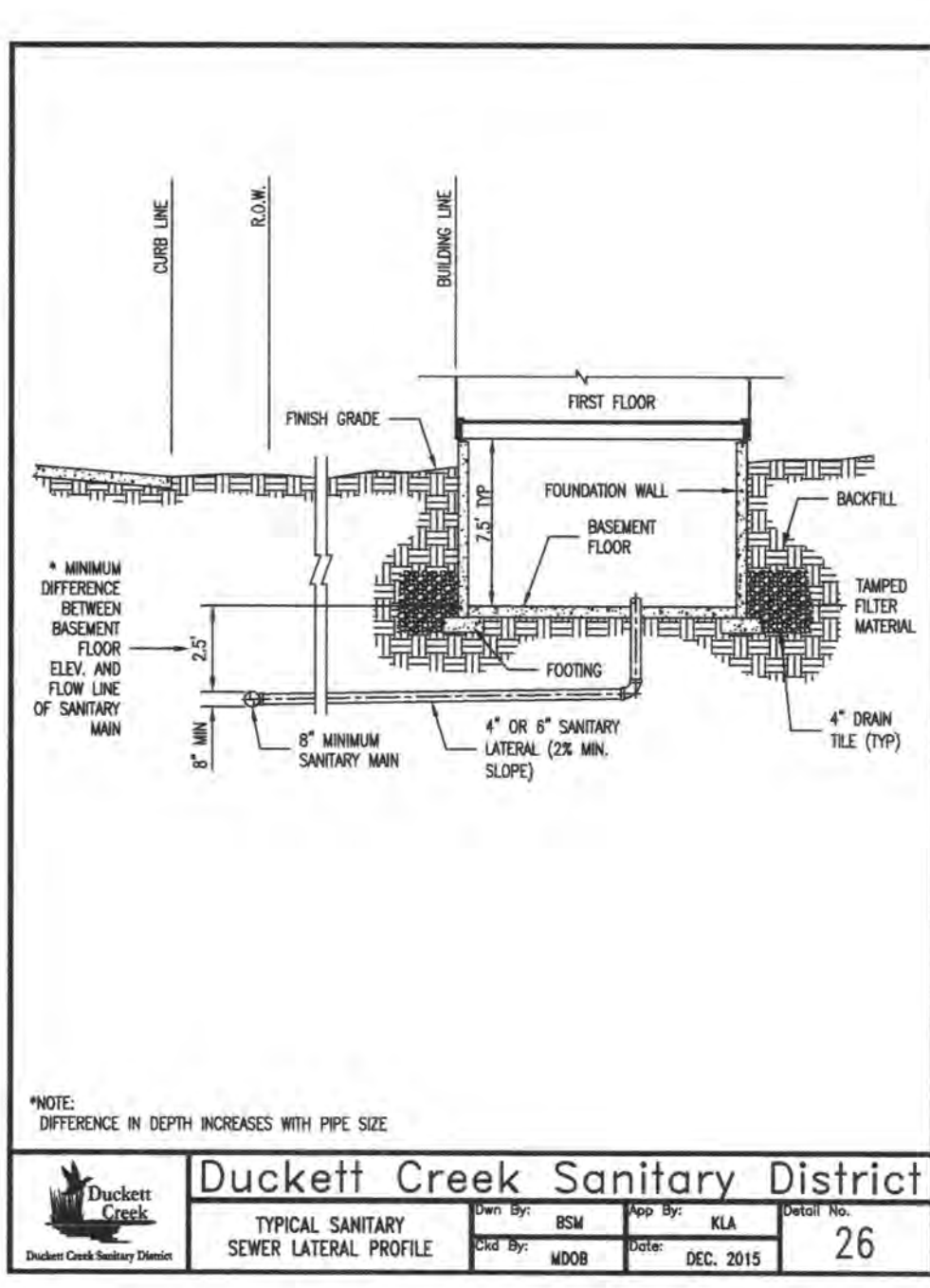
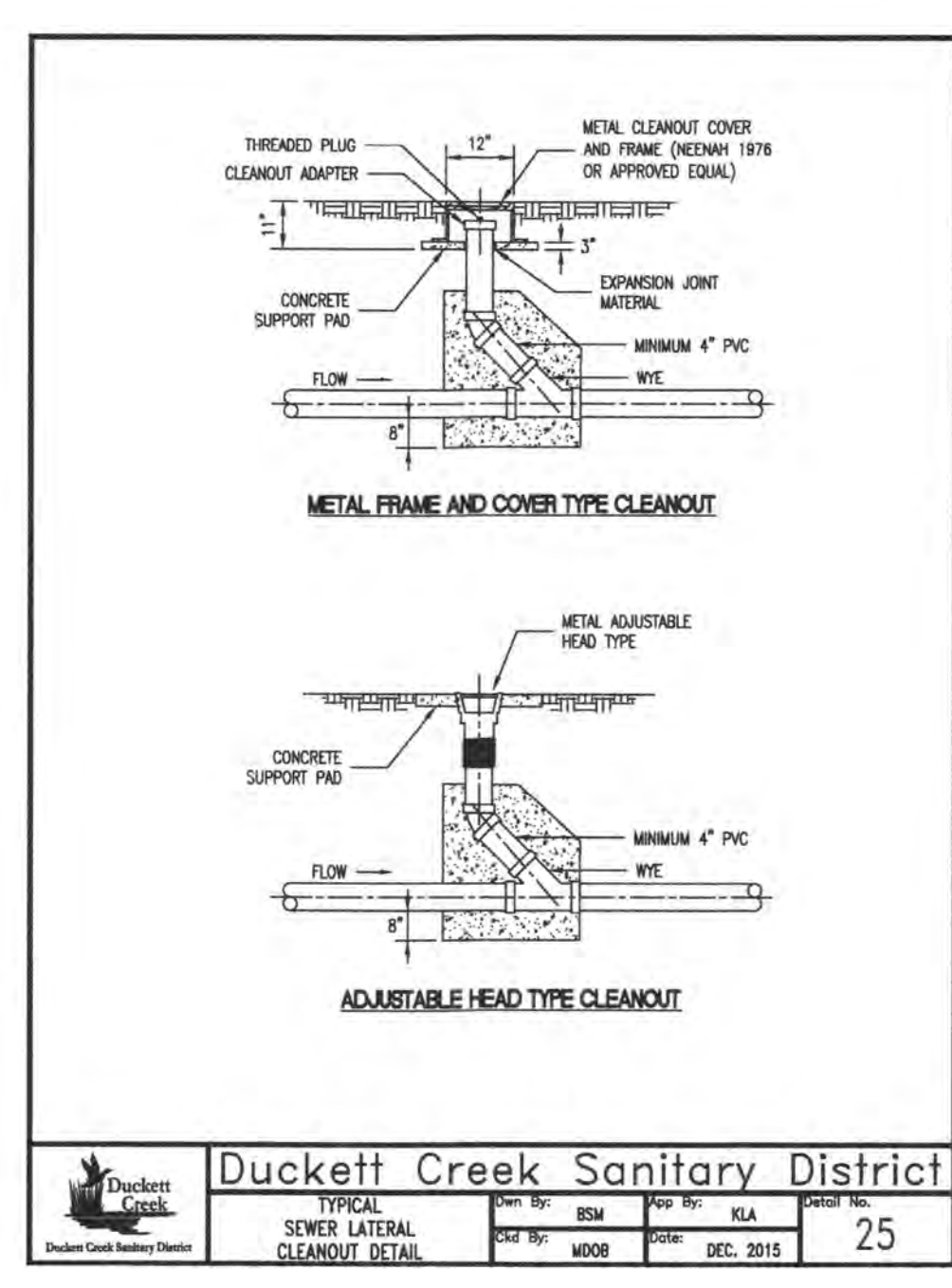
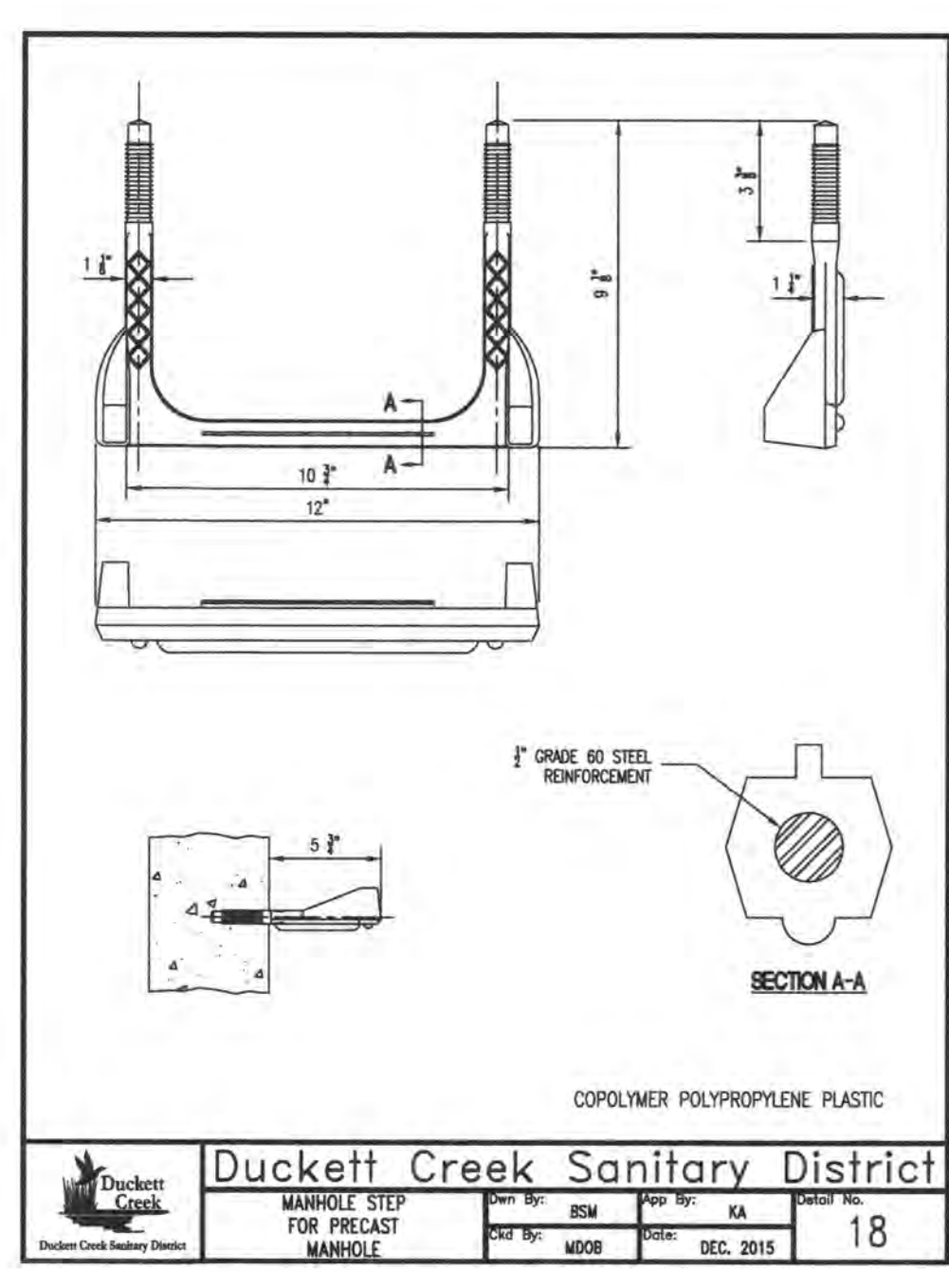
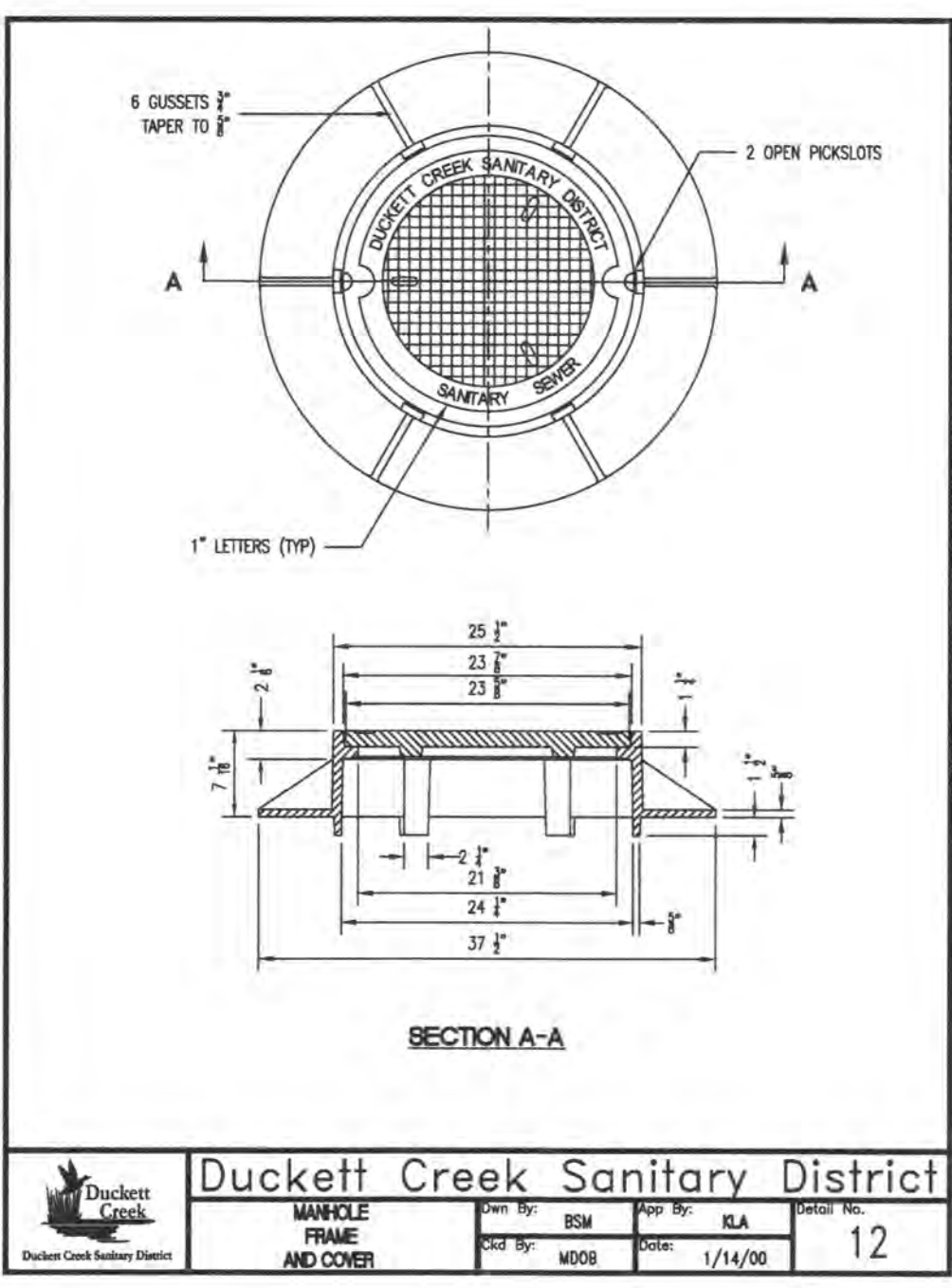
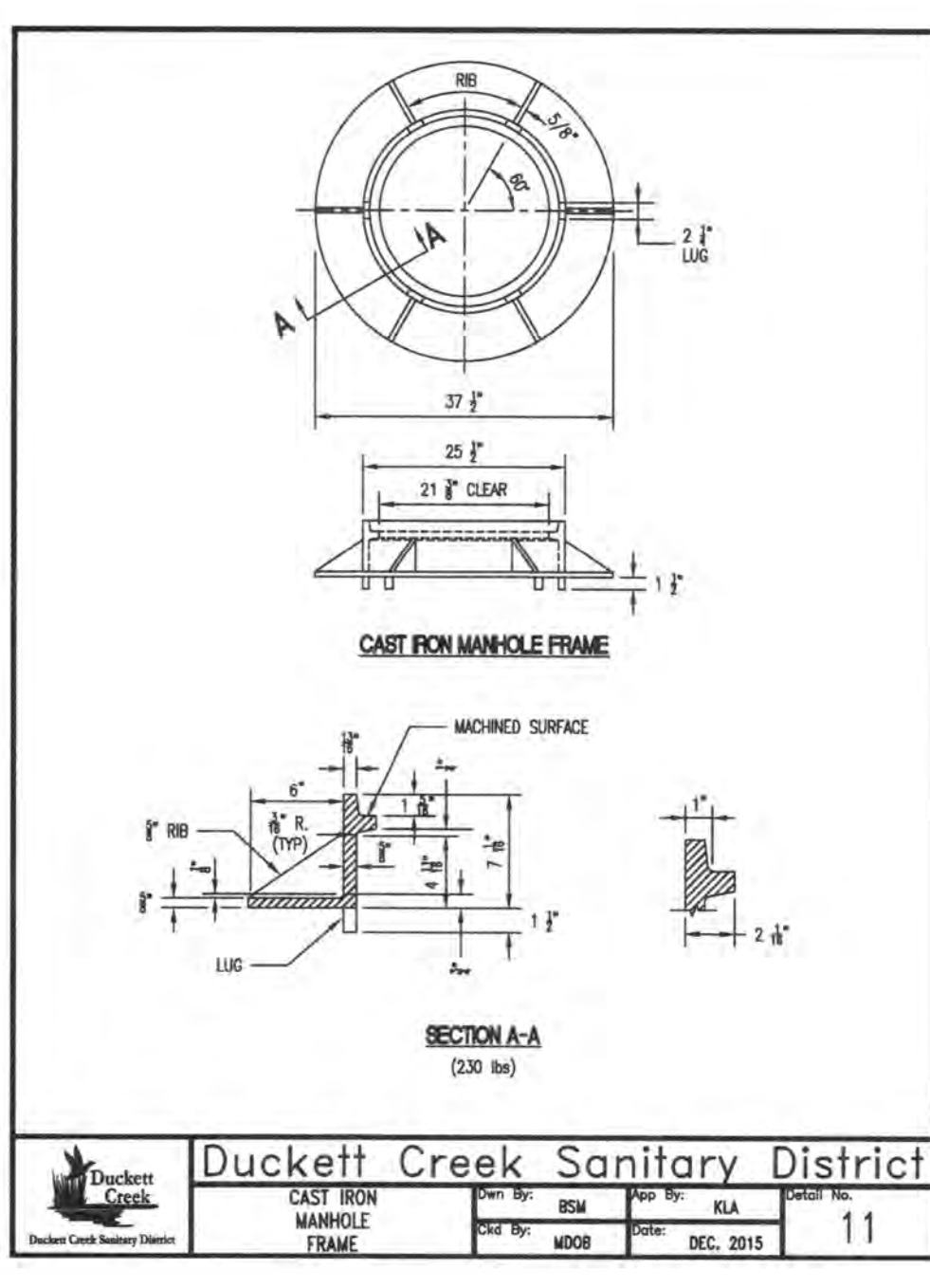
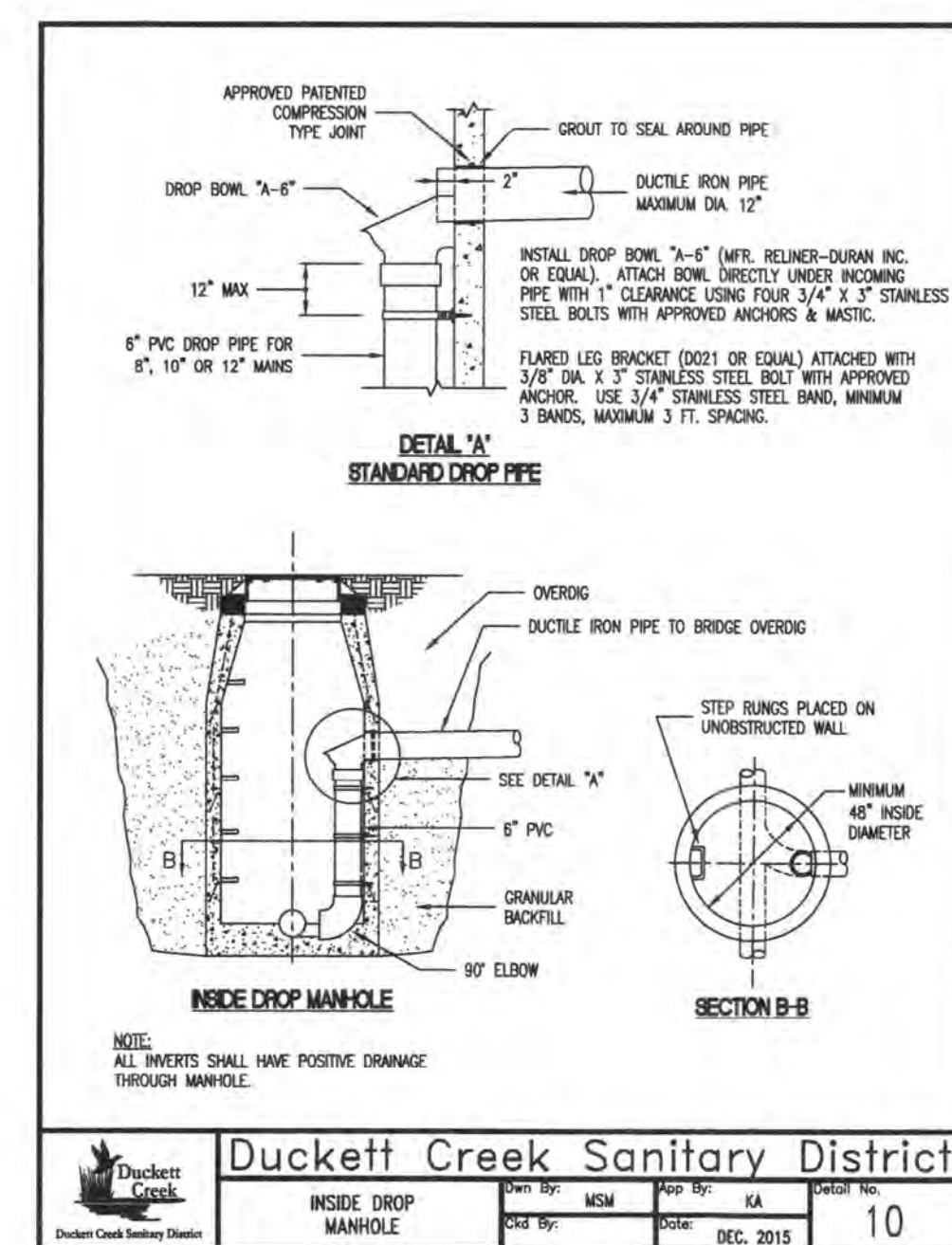
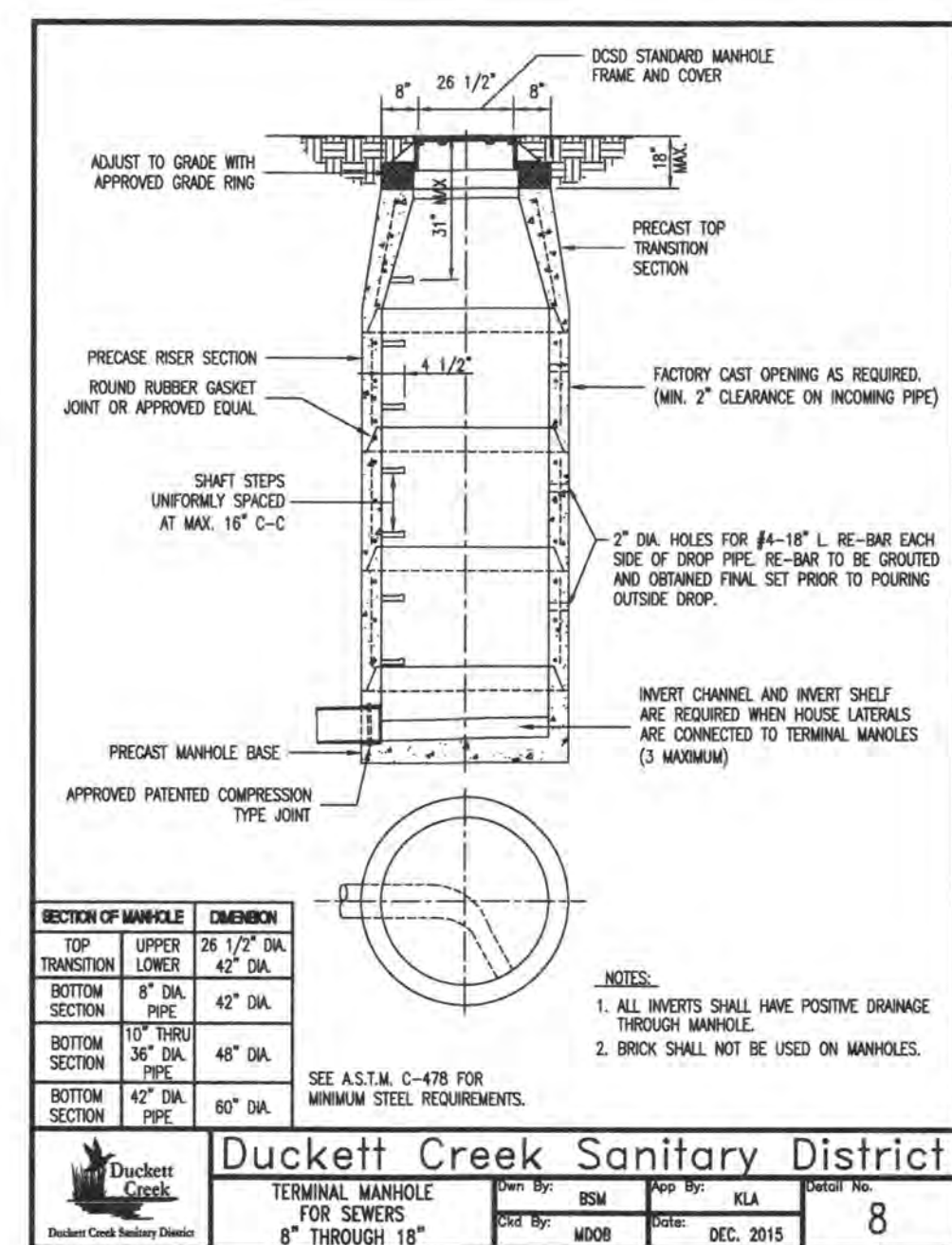
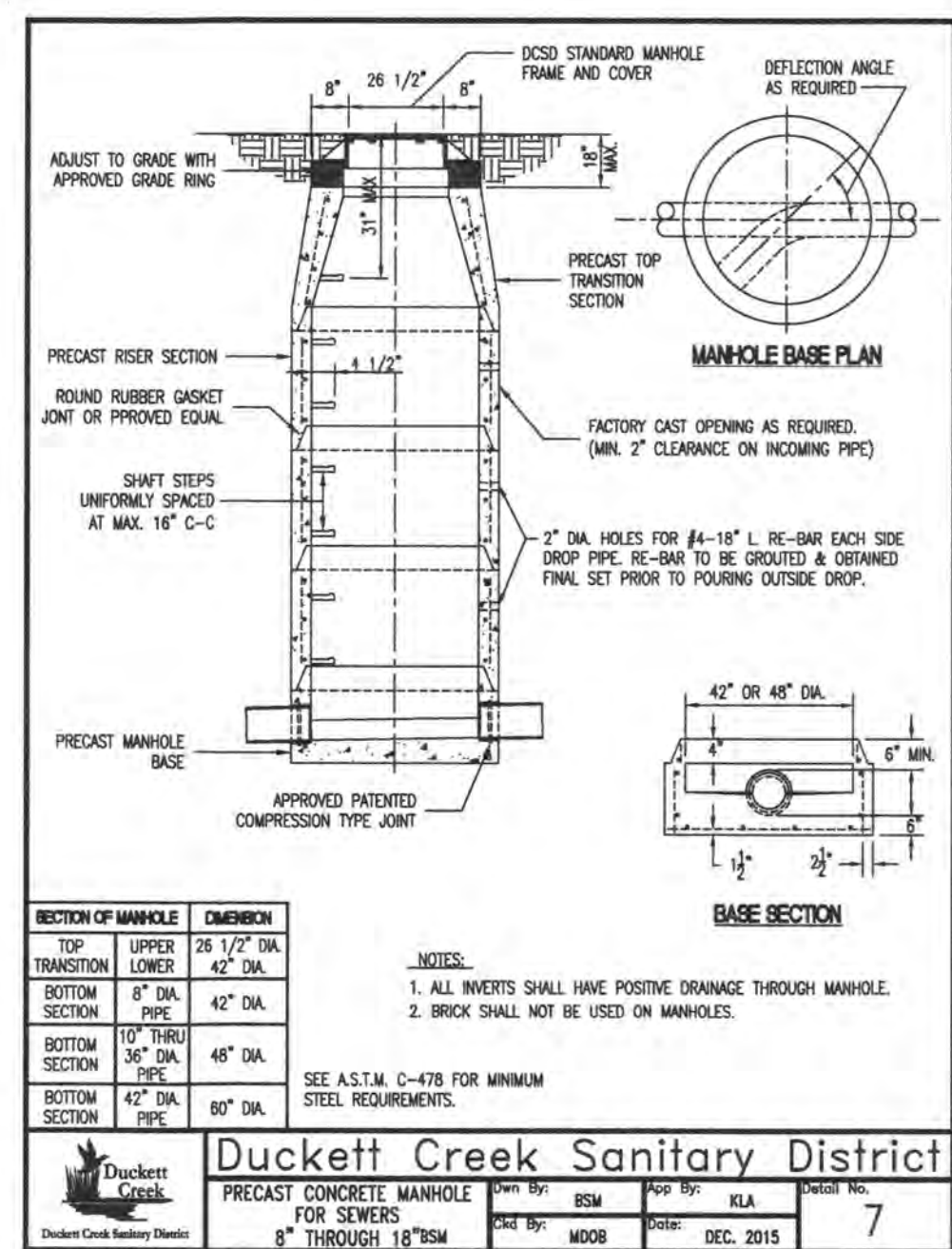
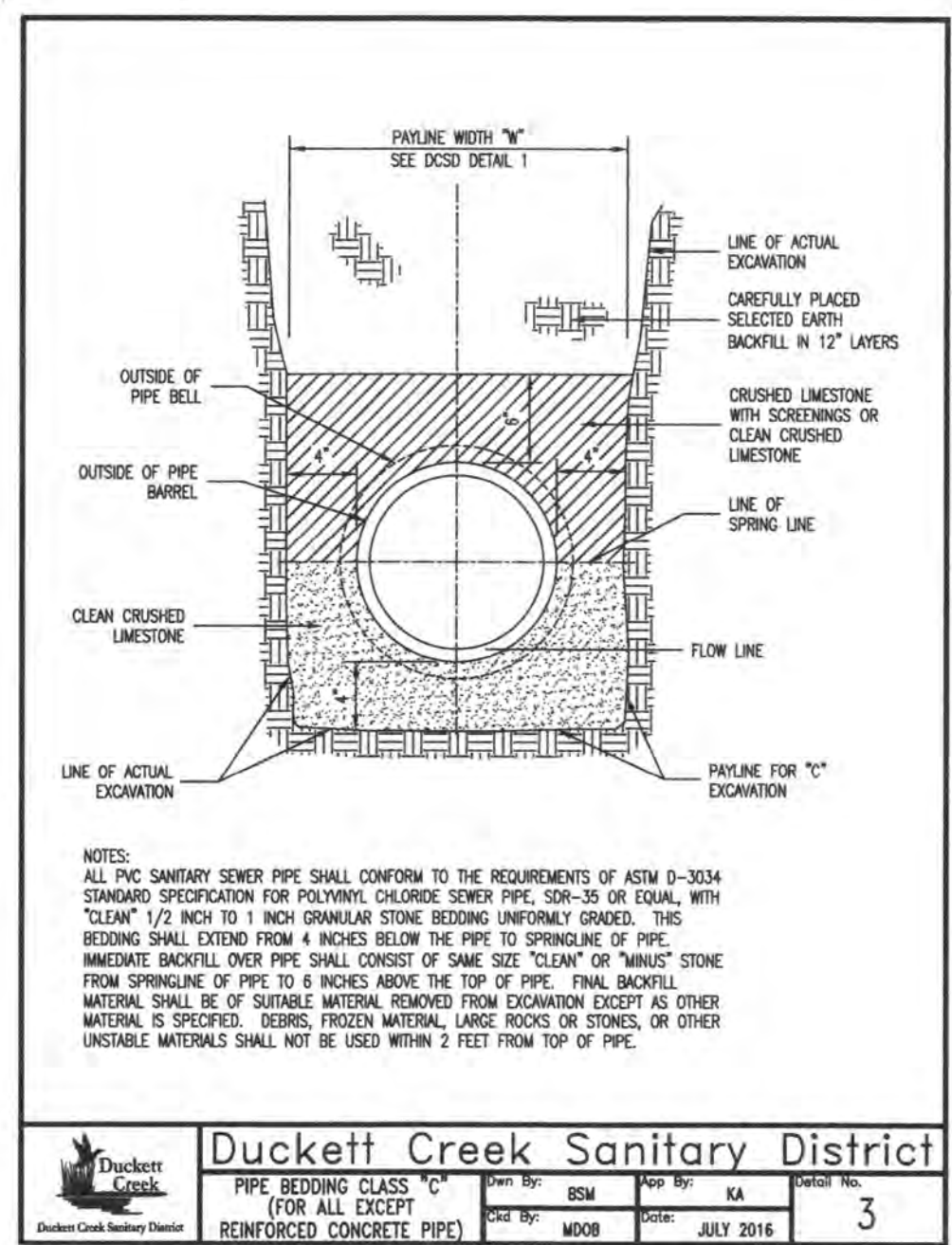
REFERENCE DETAILS

Developer / Owner:
KAPB, L.L.C.
410 CRESTVIEW DRIVE
O'FALLON, MO 63366
636-272-4200

REFERENCE DETAILS

P+Z No. #27-15.05, 05/11/17
City No. #CITY
Page No. 35 of 41

ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
INSIDE DIAMETER OF PIPE (INCHES)	PAVING WIDTH OF TRENCH (INCHES)	PAVING VOLUMES CU. FT. PER FT.	CONCRETE ENCRUSTMENT	INSIDE DIAMETER OF PIPE (INCHES)	PAVING WIDTH OF TRENCH (INCHES)	PAVING VOLUMES CU. FT. PER FT.	CONCRETE ENCRUSTMENT
4	30	2.50	3.28				
6	30	2.50	3.59				
8	30	2.50	3.87				
10	30	2.50	4.08				
12	30	2.50	4.25				
15	36	3.00	5.55				
18	36	3.00	5.77	14 x 23	41	3.42	5.94
21	39	3.25	6.61				
24	42	3.50	7.39	19 x 30	49	4.08	7.68
27	45	3.75	8.18	22 x 34	53	4.42	8.61
30	48	4.08	9.30	24 x 38	58	4.83	9.70
33	53	4.42	10.53	27 x 42	62	5.17	10.71
36	56	4.67	11.43	29 x 45	66	5.50	11.72
39		DISCONTINUED		32 x 49	71	5.92	13.14
42	63	5.25	13.38	34 x 53	75	6.25	14.05
48	72	6.00	15.67	38 x 60	83	6.92	16.18
54	77	6.42	18.15	43 x 68	92	7.67	18.81
60	84	7.00	20.73	48 x 76	101	8.42	21.59
66	91	7.58	23.45	53 x 83	109	9.08	24.35
72	98	8.17	26.37	58 x 91	118	9.83	27.45
78	105	8.75	29.39	63 x 98	126	10.50	30.50
84	112	9.33	32.57	68 x 106	135	11.25	33.91
90	119	9.92	35.90	72 x 113	143	11.92	36.99
96	126	10.50	39.37	77 x 121	152	12.67	40.69
102	133	11.08	42.99	82 x 128	160	13.33	44.45
108	140	11.67	46.75	87 x 136	168	14.00	47.79
114	147	12.25	50.66	92 x 143	176	14.67	51.70
120	154	12.83	54.72	97 x 151	185	15.42	56.01
126	161	13.42	58.92				
132	168	14.00	63.27	106 x 166	202	16.83	64.48
144	182	15.17	72.40	116 x 180	218	18.17	73.59



DUCKETT CREEK SANITARY DISTRICT CONSTRUCTION NOTES

- Underground utilities have been plotted from available information and therefore location shall be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans, shall be the responsibility of the contractor and shall be located prior to any grading or construction of improvements.
- Gas, water and other underground utilities shall not conflict with the depth or horizontal location of existing or proposed sanitary and storm sewers, including house laterals.
- All existing site improvements disturbed, damaged or destroyed shall be repaired or replaced to closely match preconstruction conditions.
- All fill including places under proposed storm and sanitary sewer lines and paved areas including trench backfills within and off the road right-of-way shall be compacted to 90 percent of maximum density as determined by the "Modified AASHTO T-180 Compaction Test (ASTM D1557)". All tests shall be verified by a Soils Engineer concurrent with grading and backfilling operations. The compacted fill shall be free of rutting and shall be non-yielding and non-pumping during proofrolling and compaction.
- The contractor shall prevent all storm, surface water, mud and construction debris from entering the existing sanitary sewer system. The contractor will be required to install a brick bulkhead on the downstream side of the first new manhole constructed when connecting into existing sewers.
- All sanitary sewer flowlines and tops built without elevations furnished by the engineer will be the responsibility of the sewer contractor.
- It is the responsibility of the contractor to adjust all sanitary sewer manholes (that are affected by the development) to finish grade.
- Easements shall be provided for all sanitary sewers, storm sewers and all utilities on the record plat.
- All sanitary sewer construction and materials shall conform to the current construction standards of the Duckett Creek Sanitary District.
- The Duckett Creek Sanitary District shall be notified at least 48 hours prior to construction for coordination of inspection.
- All sanitary sewer building connections shall be designed so that the minimum vertical distance from the low point of the basement to the flowline of a sanitary sewer at the corresponding building connection shall not be less than the diameter of the pipe plus the vertical distance of 2 1/2 feet.
- All sanitary sewer manholes shall be watertight in accordance with Missouri Dept. of Natural Resources specification 10 CSR 20-8.120(B)(F) 1.
- All PVC sanitary sewer pipe shall conform to the requirements of ASTM D-3034 Standard Specification for PSM Polyvinyl Chloride Sewer Pipe, SDR-35 or equal, with "clear" 1/2 inch to 1 inch granular stone bedding uniformly graded. This bedding shall extend from 4 inches below the pipe to springline of pipe. Immediate backfill over pipe shall consist of same size "clear" or "minus" stone from springline of pipe to 6 inches above the top of pipe. Final backfill material shall be of suitable material removed from excavation except as other material is specified. Debris, frozen material, large rocks or stones, or other unstable materials shall not be used within 2 feet from top of pipe.
- All sanitary and storm sewer trench backfills shall be water jetted. Granular backfill will be used under pavement areas.
- All pipes shall have positive drainage through manholes. Flat invert structures not allowed.
- Epoxy Coating shall be used on all sanitary sewer manholes that receive pressurized mains.
- All creek crossings shall be lined with rip-rap as directed by District inspectors.
- Brick shall not be used on sanitary sewer manholes.
- Existing sanitary sewer service shall not be interrupted.
- Maintain access to existing residential driveways and streets.
- Pre-manufactured adapters shall be used at all PVC to DIP connections. Rubber boot / Mission-type couplings will not be allowed.
- Any permits, licenses, easements, or approvals required to work on public or private properties or roadways are the responsibility of the developer.
- Type N' Lock-Type Cover and Locking Device (Lock-Lug) shall be used where lock-type covers are required.
- All sanitary sewer system work shall be conducted under the inspection of a representative of the District. All work may not require inspection but the District's representative may designate specific areas that must be inspected before work is backfilled. All testing must be witnessed by the District's Inspector and the Contractor shall furnish all testing equipment as approved by the District. Testing shall include:
 - A mandrel test of all gravity sewers using a mandrel with a diameter that has a diameter 85% of the inside pipe diameter. If the mandrel test fails on any section of pipe, that section of pipe shall be uncovered and replaced. No expansion devices will be allowed to be used to "force" the pipe that is deformed back into round. Any string lines used in mandrel testing shall be removed after testing is completed. Deflection testing cannot be conducted prior to 30 days after final backfill.
 - An air pressure test of all gravity sewers to a pressure of 5 PSI with no observed drop in pressure during a test period of 5 minutes.
 - A vacuum test of all manholes for a period of 1 minute and the vacuum shall be 10" of mercury and may not drop below 9" of mercury at the end of the 1 minute test.

Revised October 2016
25. Contact Steve Overby, DCSD Chief Inspector, at 636-441-1244 to schedule inspection. 48 hours of advanced notice is required.

PROJECT TITLE:
LEGENDS POINTE
PHASE ONE
AS-BUILT PLANS
(formerly THE VILLAGES
AT RHODES FARM)

**ENGINEERING
PLANNING
SURVEYING**

221 Point West Blvd.
St. Charles, MO 63301
636-928-6562
FAX 636-928-1718

Box Engineering Company, Inc.
Missouri State Certificate of Authority
Engineering #000655
Missouri State Certificate of Authority
Surveying #000144

REVISIONS

DATE	REVISIONS
06/20/18	CITY COMMENT REV.
08/03/18	CITY COMMENT REV.
06/05/19	CITY COMMENT REV.
08/06/19	CITY COMMENT REV.
10/17/19	CITY COMMENT REV.

Developer / Owner:
KAPB, L.L.C.
410 CRESTVIEW DRIVE
O'FALLON, MO 63366
636-272-4200

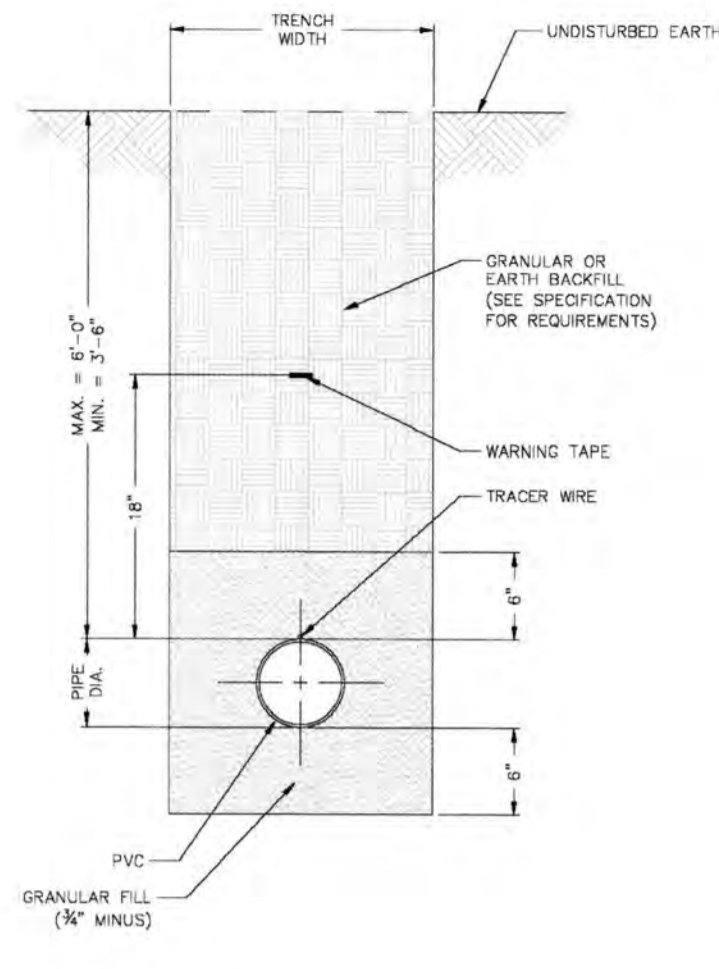
P+Z No.
#27-15.05, 05/11/17

City No.
#CITY

Page No.
37 of 41

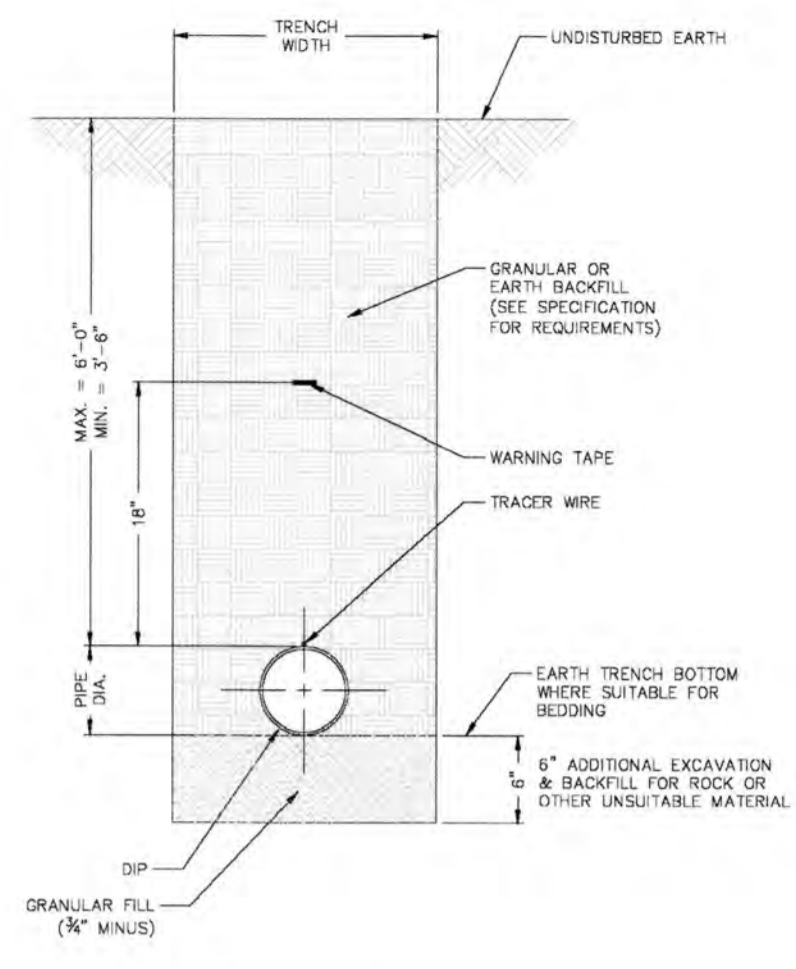
SANITARY SEWER DETAILS

ENGINEERS SEAL DOES NOT APPLY TO DETAILS ON THIS SHEET.



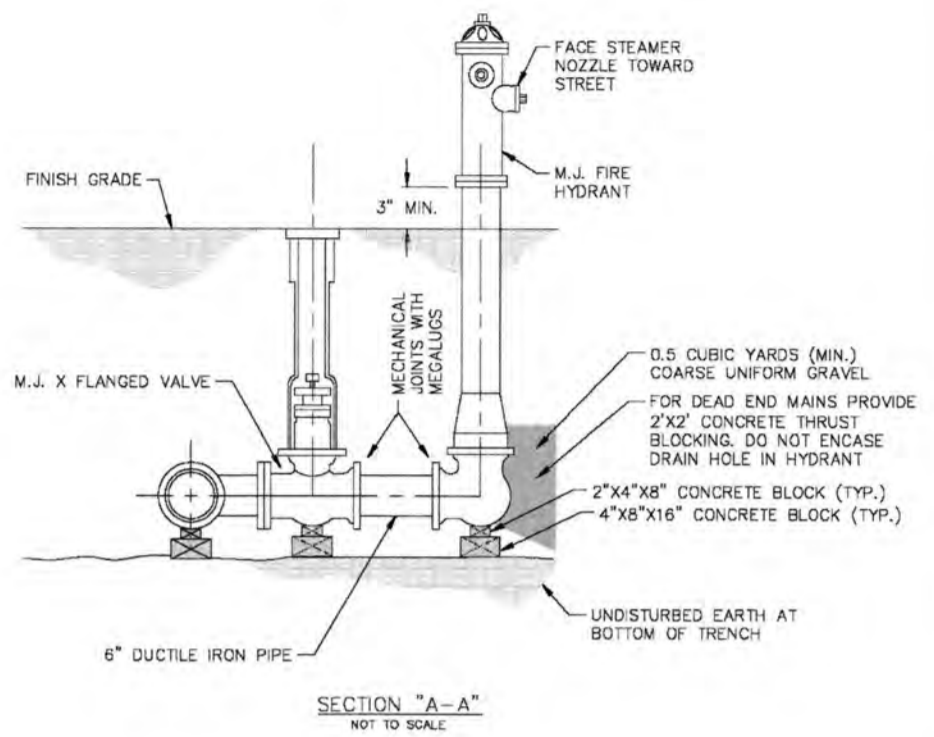
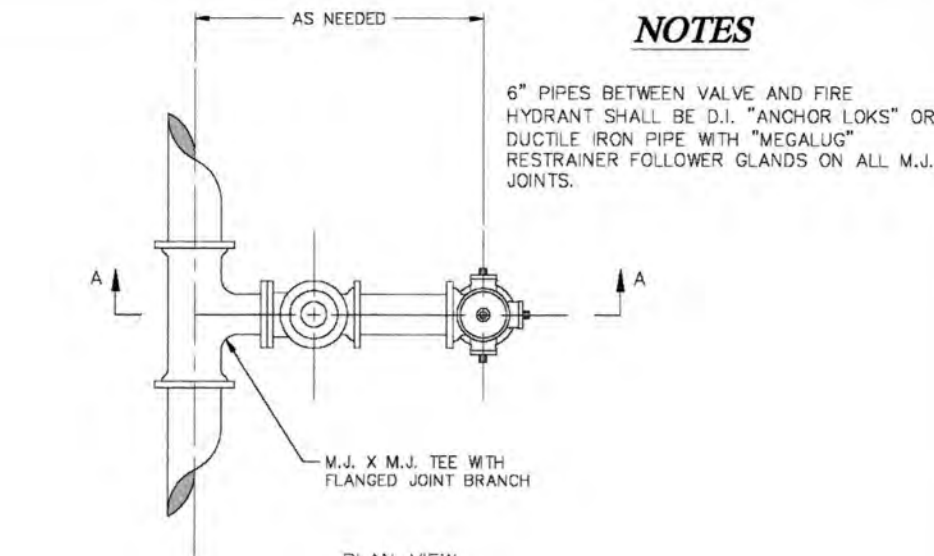
NOTES
1) SEE SPECIFICATIONS FOR ADDITIONAL DETAILS FOR BEDDING AND BACKFILL.

TYPICAL TRENCH SECTION FOR PVC PIPE
DETAIL "A"
PAGE 1 OF 2

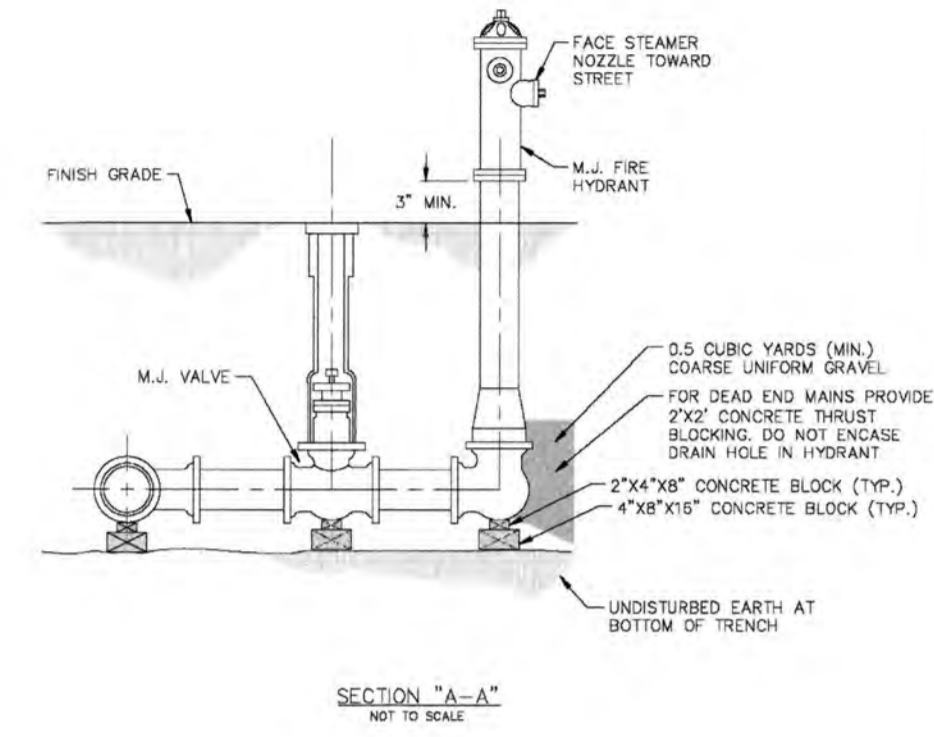
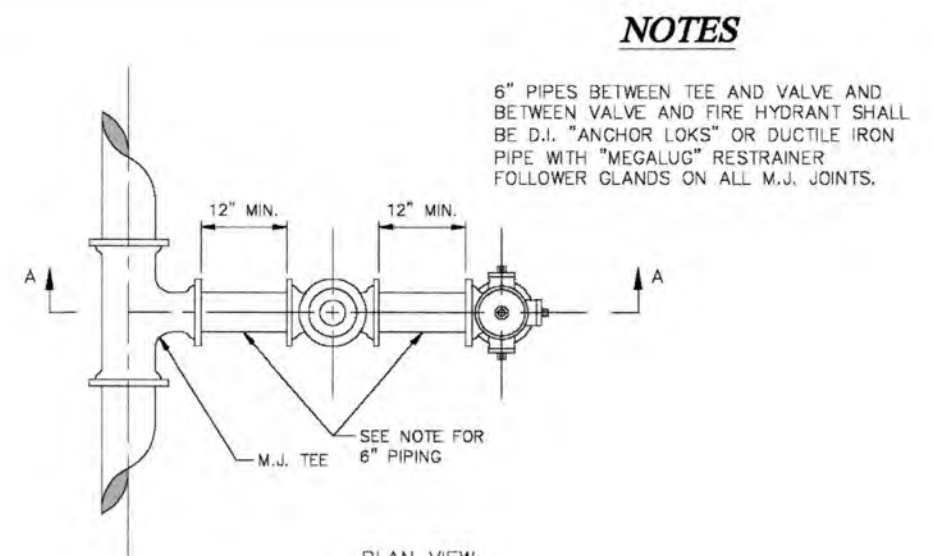


NOTES
1) POLYWRAP REQUIRED FOR DUCTILE IRON PIPE
2) SEE SPECIFICATIONS FOR ADDITIONAL DETAILS FOR BEDDING AND BACKFILL.

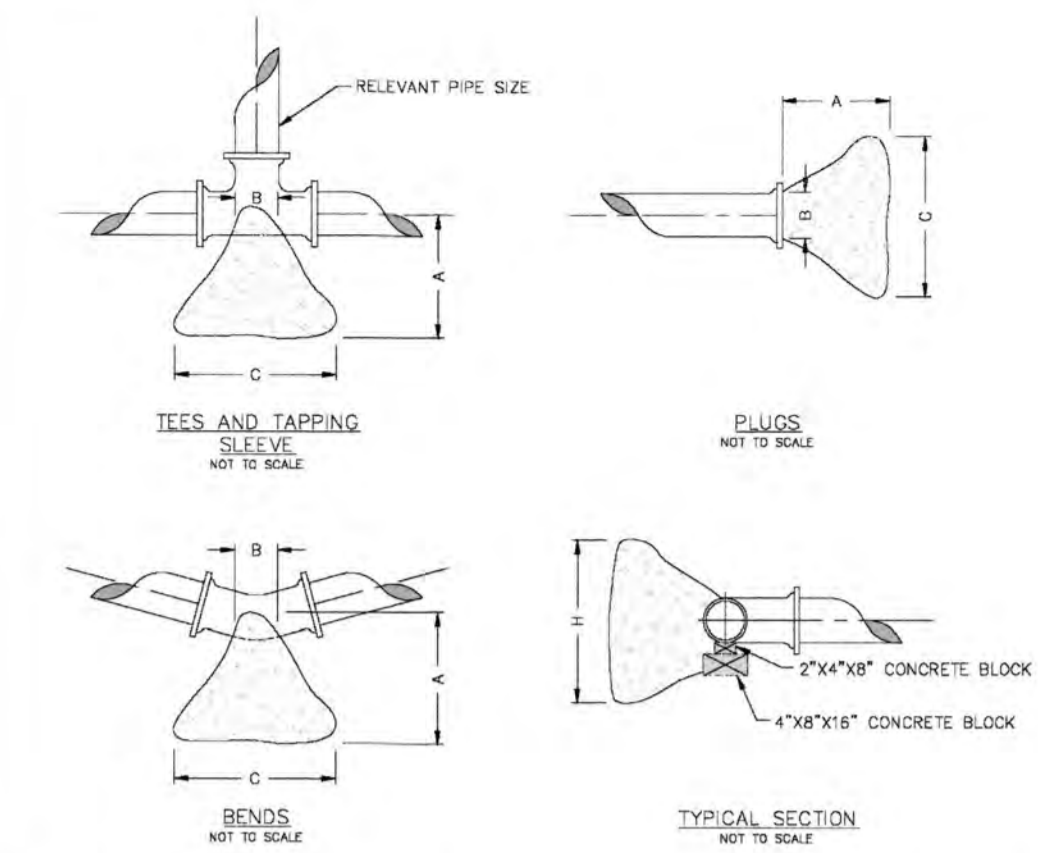
TYPICAL TRENCH SECTION FOR DUCTILE IRON PIPE
DETAIL "A"
PAGE 2 OF 2



FIRE HYDRANT DETAIL
DETAIL "B"
PAGE 1 OF 3



FIRE HYDRANT DETAIL
DETAIL "B"
PAGE 2 OF 3

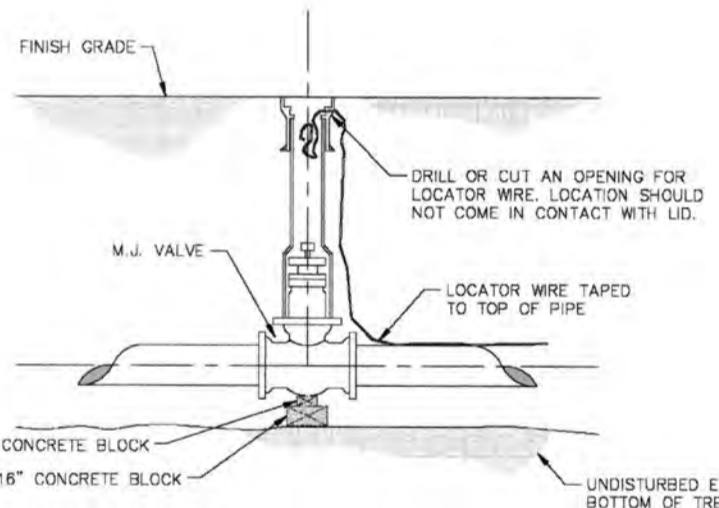


THRUST BLOCK DIMENSIONS - INCHES

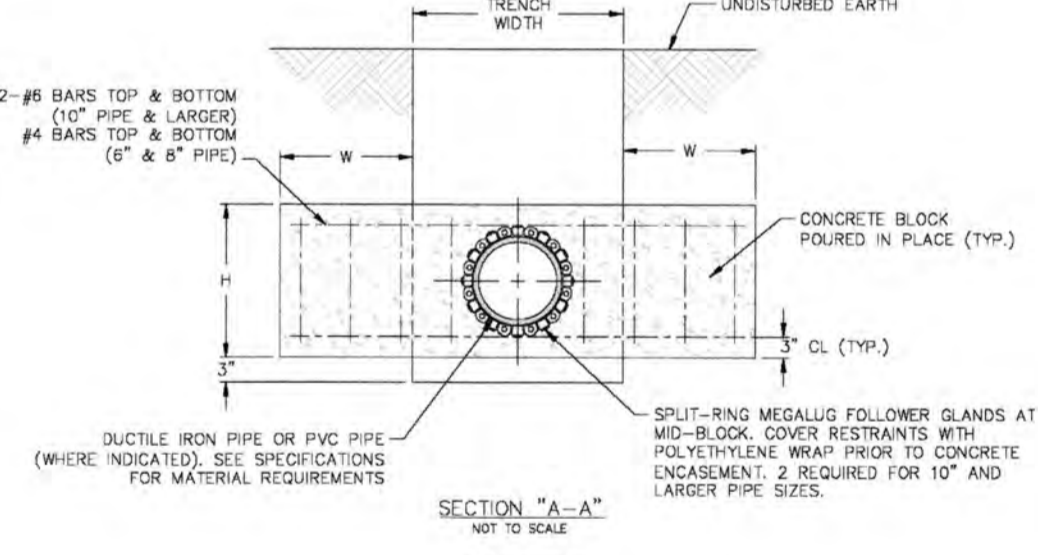
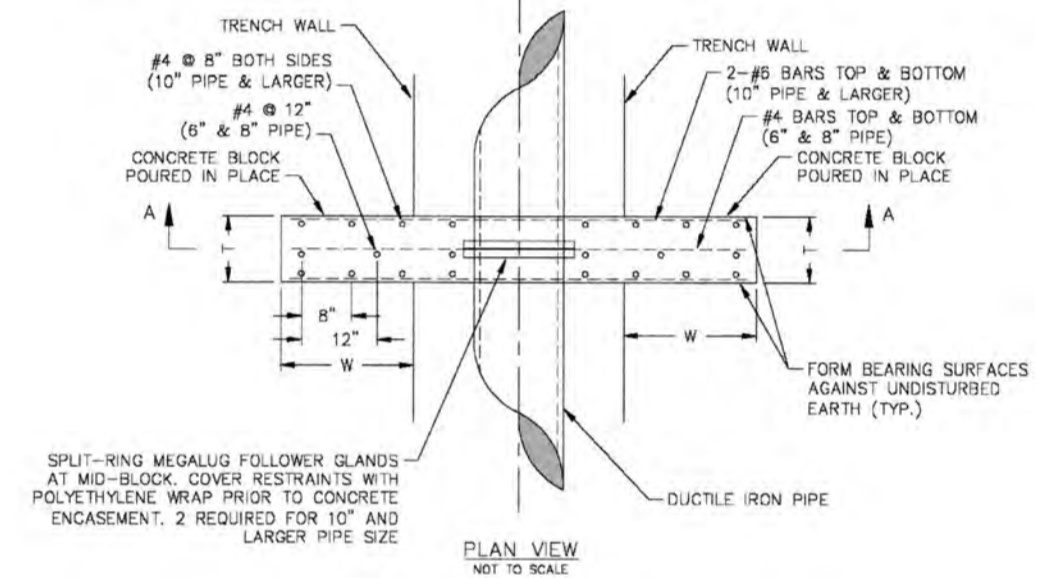
PIPE DIA.	ALL FTGS.		TEE PLUG TAPPING		90 DEGREE BEND		45 DEGREE BEND		22-1/2 BEND		11-1/4 BEND	
	A	B	C	H	C	H	C	H	C	H	C	H
4	14	4	24	12	26	15	18	12	12	12	12	12
6	16	6	36	18	36	24	30	18	24	12	12	12
8	20	8	36	30	42	36	36	24	24	18	18	18
10	20	10	48	36	66	36	36	28	24	18	18	18
12	24	12	68	36	82	42	52	36	40	24	28	18

NOTE
FOR FITTINGS LARGER THAN 12", SPECIAL RESTRAINT DESIGNS ARE REQUIRED.

HORIZONTAL THRUST-BLOCKING
DETAIL "C"



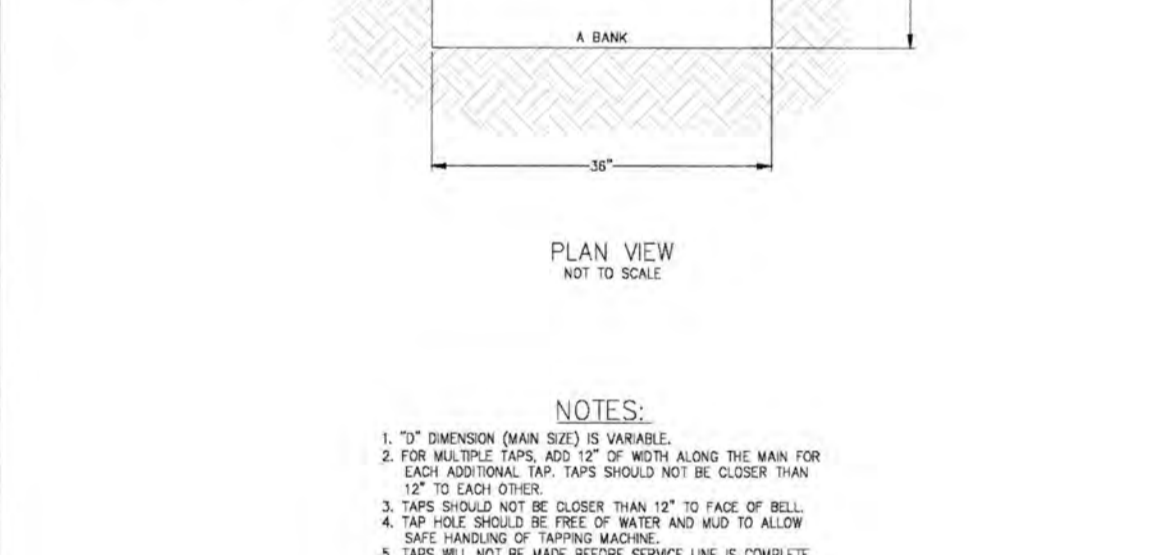
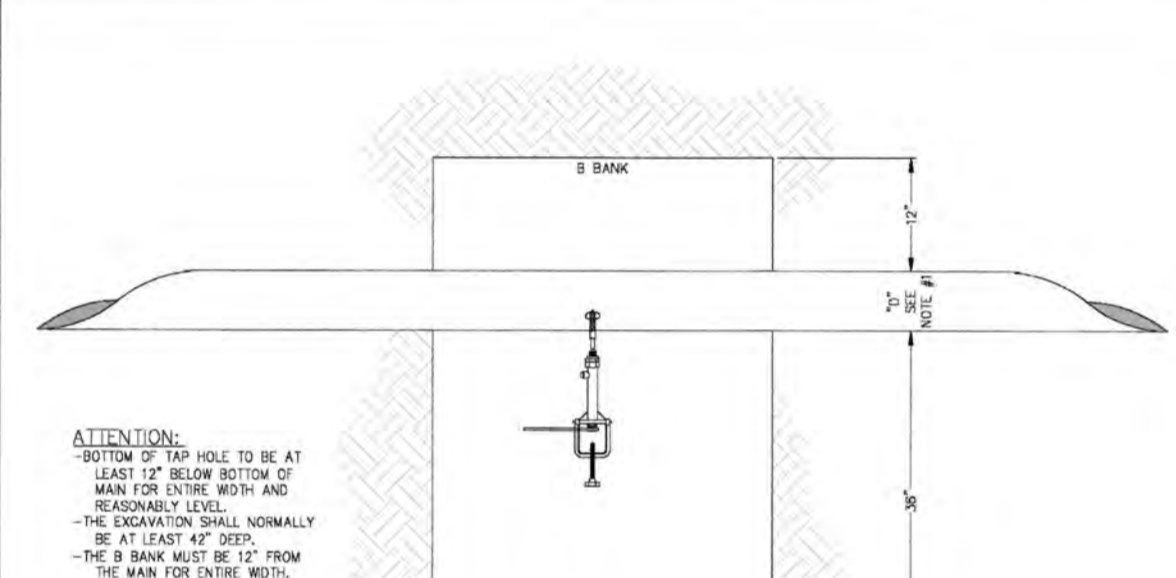
GATE VALVE DETAIL
DETAIL "D"



NOTES
1) CONSTRUCT CROSS BLOCKS AT A MINIMUM OF 12" FROM CONNECTION POINT AND 5' FROM THE BELL END OF PIPE.
2) CROSS BLOCKS SHALL BE PRE-POURED PRIOR TO SHUTDOWN AND CONNECTIONS.

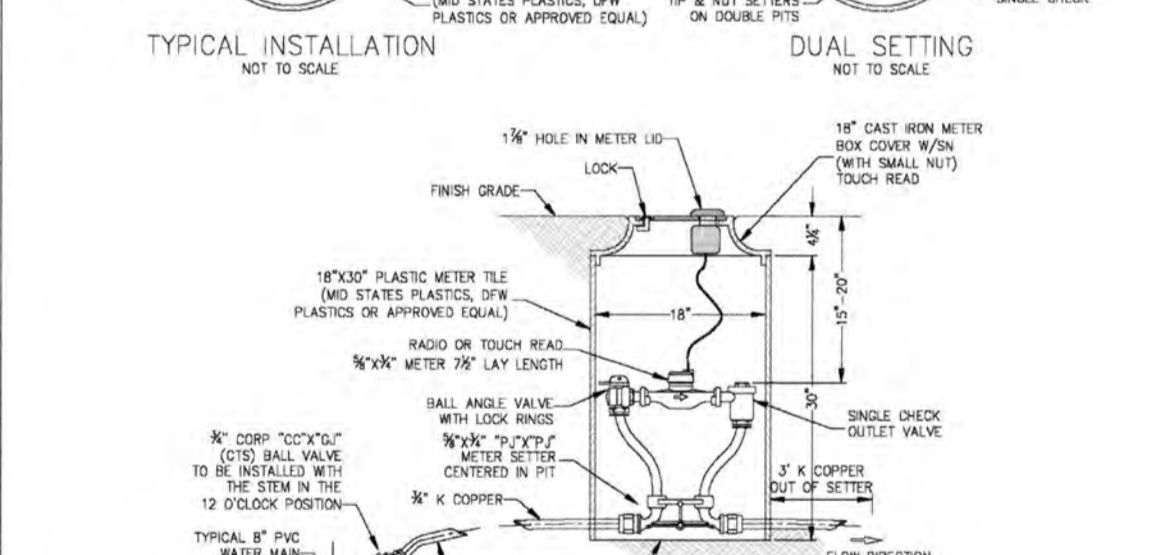
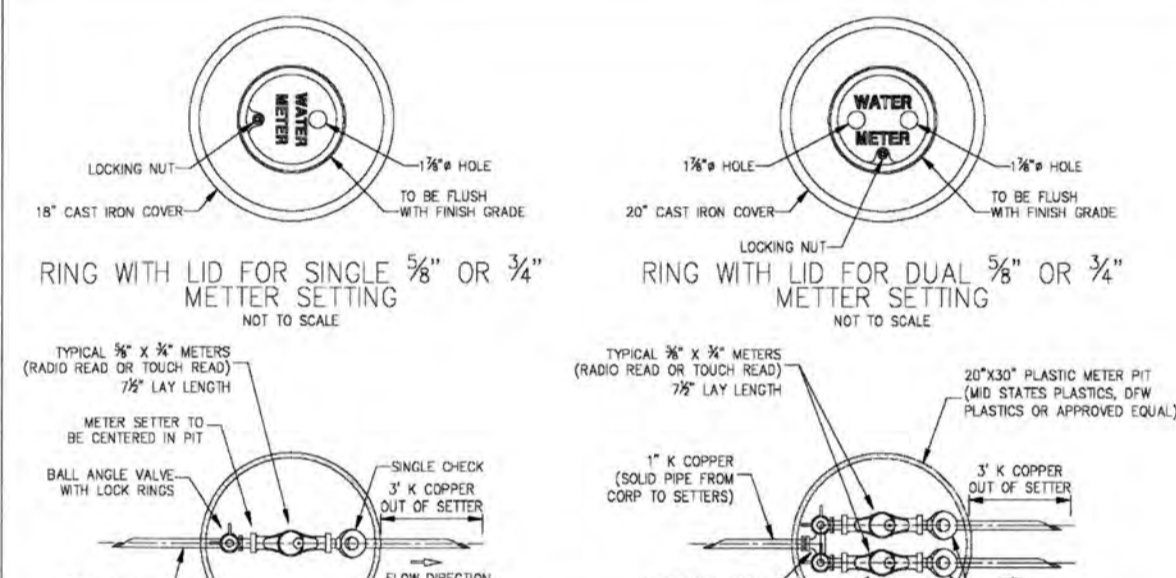
PIPE DIA. 1/2"	CROSS BLOCK DIMENSIONS		
	WIDTH 1/2"	HEIGHT 1/2"	THICKNESS 1/2"
4	12	12	12
6	24	24	12
8	36	36	12
10	36	36	18
12	36	36	18

CROSS SECTION
DETAIL "E"



NOTES
1) TAP DIMENSION (MAIN SIZE) IS VARIABLE.
2) FOR MAIN SIZE TAPS AND 2" TAPS ALONG THE MAIN FOR EACH ADDITIONAL TAP, TAPS SHOULD NOT BE CLOSER THAN 12" TO EACH OTHER.
3) TAPS SHOULD BE CLOSER THAN 12" TO FACE OF BELL.
4) TAP HOLE SHOULD BE FREE OF WATER AND MUD TO ALLOW SAFE HANDLING OF SERVICE MAINS.
5) TAPS WILL NOT BE MADE BEFORE SERVICE LINE IS COMPLETE.
6) TAP HOLE MUST BE CLEAN ENOUGH TO REMOVE ANY DAMAGE TO LINE, MAKING SURE.
7) THE EXCAVATION MUST COMPLY WITH ALL OSHA REGULATIONS.
8) BACKFILL TAPS WILL BE AT THE DISCRETION OF WATER DISTRICT PERSONNEL.

TYPICAL 3/4" SERVICE CONNECTIONS TAP HOLE DIMENSIONS
DETAIL "A"
PUBLIC WATER SUPPLY DISTRICT #2 OF SAINT CHARLES COUNTY



NOTES
1) TAP DIMENSION (MAIN SIZE) IS VARIABLE.
2) FOR MAIN SIZE TAPS AND 2" TAPS ALONG THE MAIN FOR EACH ADDITIONAL TAP, TAPS SHOULD NOT BE CLOSER THAN 12" TO EACH OTHER.
3) TAPS SHOULD BE CLOSER THAN 12" TO FACE OF BELL.
4) TAP HOLE SHOULD BE FREE OF WATER AND MUD TO ALLOW SAFE HANDLING OF SERVICE MAINS.
5) TAPS WILL NOT BE MADE BEFORE SERVICE LINE IS COMPLETE.
6) TAP HOLE MUST BE CLEAN ENOUGH TO REMOVE ANY DAMAGE TO LINE, MAKING SURE.
7) THE EXCAVATION MUST COMPLY WITH ALL OSHA REGULATIONS.
8) BACKFILL TAPS WILL BE AT THE DISCRETION OF WATER DISTRICT PERSONNEL.

TYPICAL 3/4" RESIDENTIAL WATER SERVICE
DETAIL "B"
PUBLIC WATER SUPPLY DISTRICT #2 OF SAINT CHARLES COUNTY

AS-BUILT PUBLIC UTILITY FINAL MEASUREMENTS

THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:
• STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
• SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
• FIRE HYDRANTS
• WATER VALVES
• LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

SIGNED: _____
P.E./L.S. _____



Developer / Owner:
KAPB, L.L.C.
410 CRESTVIEW DRIVE
O'FALLON, MO 63366
636-272-4200

P+Z No. #27-15.05, 05/11/17
City No. #CITY
Page No. 38 of 41

ENGINEERS SEAL DOES NOT APPLY TO DETAILS ON THIS SHEET.

PROJECT TITLE:
LEGENDS POINTE
PHASE ONE
AS-BUILT PLANS
(formerly THE VILLAGES AT RHODES FARM)

Box Project # 12-154708 Issue Date: 01/17/2018



Box Engineering, Inc.
Missouri State Certificate of Authority Engineering #000655
Missouri State Certificate of Authority Surveying #00144

REVISIONS

DATE	REVISION
1/22/18	PWS#2 REVISIONS
06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

Box Engineering Company, Inc.
Missouri State Certificate of Authority Engineering #000655
Missouri State Certificate of Authority Surveying #00144

WATER DETAILS

WEIGHT AND DIMENSIONS DATA											
OPENING	WEIGHT	BEARING BARS		DIMENSIONS		DIMENSIONS		REMARKS			
WIDTH	LENGTH	W	L	X	Y	NUMBER	a	b	c	d	e
3'-0"	2'-0"	190	3"	3"	2'-5 1/2"	11	3"	2 1/2"			2'-6 1/2"
3'-0"	3'-0"	350	3"	3"	3'-5 1/2"	10	1 1/2"	3 1/2"			2'-5"
5'-0"	2'-0"	300	3"	3"	2'-5 1/2"	18	1"	3"	2'-3"	2'-5"	
5'-0"	3'-0"	550	3"	3"	3'-5 1/2"	17	3"	2 1/2"			2'-5"
3'-1"	2'-1"	200	3"	3"	2'-6 1/2"	11	1 1/2"	3 1/2"			2'-6 1/2"
3'-1"	3'-1"	340	3"	3"	3'-6 1/2"	10	1 1/2"	4"			2'-6"
5'-1"	2'-1"	310	3"	3"	2'-6 1/2"	18	1 1/2"	3 1/2"	2'-3"	2'-3"	
5'-1"	3'-1"	560	3"	3"	3'-6 1/2"	17	1 1/2"	3 1/2"	2'-1 1/2"	2'-5"	

(1) THE WEIGHT OF THE GRATE AND BEARING PLATE INCLUDES THE BOLTS, NUTS, AND WASHERS AND SHALL BE AS SHOWN WITH A TOLERANCE OF 5 PERCENT.

GENERAL NOTES:
 WHEN BOLTS ARE CUT IN THE FIELD, THREADS MUST BE CLEANED TO PERMIT THE FINAL NUT TO RUN FREELY ON THE BOLT.
 THE WELDING REQUIREMENTS SHOWN ON THIS DRAWING ARE FOR PAINTED GRATES AND BEARING PLATES. IF GALVANIZED, ALL TIGHTLY CONTACTING SURFACES SHALL BE COMPLETELY SEALED, ON ALL SIDES BY WELDING, PRIOR TO GALVANIZING.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
 100 WEST CAPITOL, JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)

GRATES AND BEARING PLATES
 DATE EFFECTIVE: 12/01/2005
 DATE PREPARED: 8/21/2009
 SHEET NO. 614.10T 1 OF 1

GENERAL NOTES:
 STEPS SHALL BE PLACED AT VERTICAL INTERVALS OF 16" MAXIMUM IN ALL INLETS HAVING A DEPTH OF MORE THAN 6 FEET. STEPS SHALL BEGIN AT AN ELEVATION 6" ABOVE THE TOP OF THE OUTLET PIPE.
 STEPS SHALL BE SET LEVEL AND IN VERTICAL ALIGNMENT AND NOT NEARER THAN 3" TO A JOINT.
 NO DIRECT PAYMENT WILL BE MADE FOR INLET STEPS. STEPS ARE NOT REQUIRED FOR TYPE 2 INLETS.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
 100 WEST CAPITOL, JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)

PRECAST DROP INLET
 DATE EFFECTIVE: 02/01/2016
 DATE PREPARED: 5/13/2009
 SHEET NO. 731.10S 1 OF 8

WIDTH	LENGTH	TYPE
2	2	A, B, C
4	2	D
2	2	D
3	2	E, S-1
3	3	E, S-1
5	2	S-2, S-3
5	3	S-2, S-3

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
 100 WEST CAPITOL, JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)

PRECAST DROP INLET
 DATE EFFECTIVE: 07/01/2016
 DATE PREPARED: 5/13/2009
 SHEET NO. 731.10S 2 OF 8

AS-BUILT PUBLIC UTILITY FINAL MEASUREMENTS

THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

SIGNED: DATE: _____

STATE OF MISSOURI
 MARK COLLINS
 10-11-19
 NUMBER PLS-2006000173
 PROFESSIONAL LAND SURVEYOR

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
 100 WEST CAPITOL, JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)

PRECAST DROP INLET TYPICAL DETAILS - TYPE S
 DATE EFFECTIVE: 07/01/2016
 DATE PREPARED: 5/13/2009
 SHEET NO. 731.10S 8 OF 8

PROJECT TITLE:
LEGENDS POINTE
PHASE ONE
AS-BUILT PLANS
 (formerly THE VILLAGES AT RHODES FARM)

ENGINEERING SURVEYING
 221 West Blvd. #3001
 St. Charles, MO 63301
 636-928-5522
 FAX 928-1718



DISCLAIMER OF RESPONSIBILITY
 I hereby certify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

Box Engineering Company, Inc.
 Missouri State Certificate of Authority
 Engineering #000855
 Missouri State Certificate of Authority
 Surveying #000144

REVISIONS

DATE	REVISION
06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

Developer / Owner:
 KAPB, L.L.C.
 410 CRESTVIEW DRIVE
 OFALLON, MO 63366
 636-272-4200

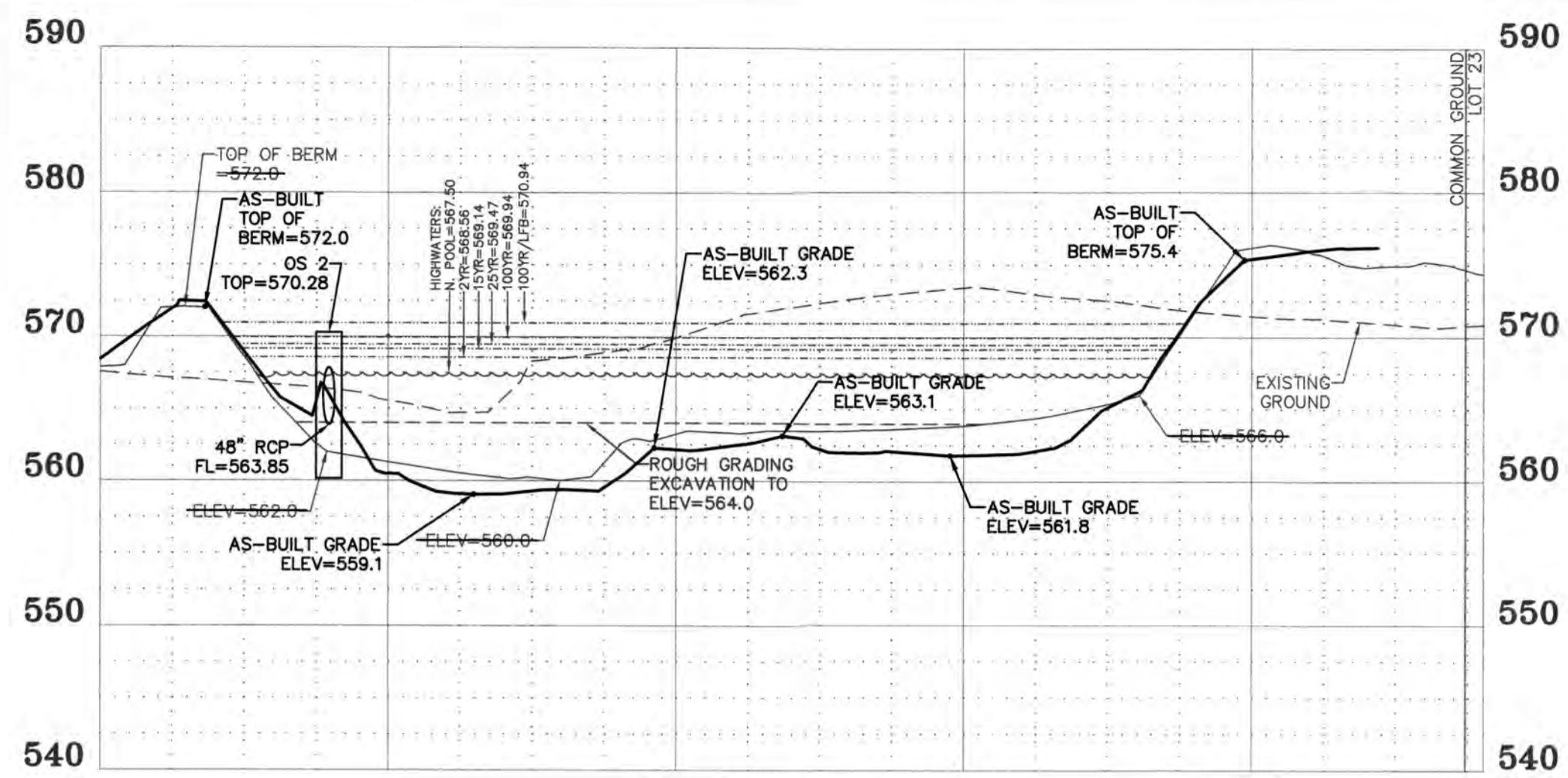
MODOT DETAILS

P+Z No.
 #27-15.05, 05/11/17

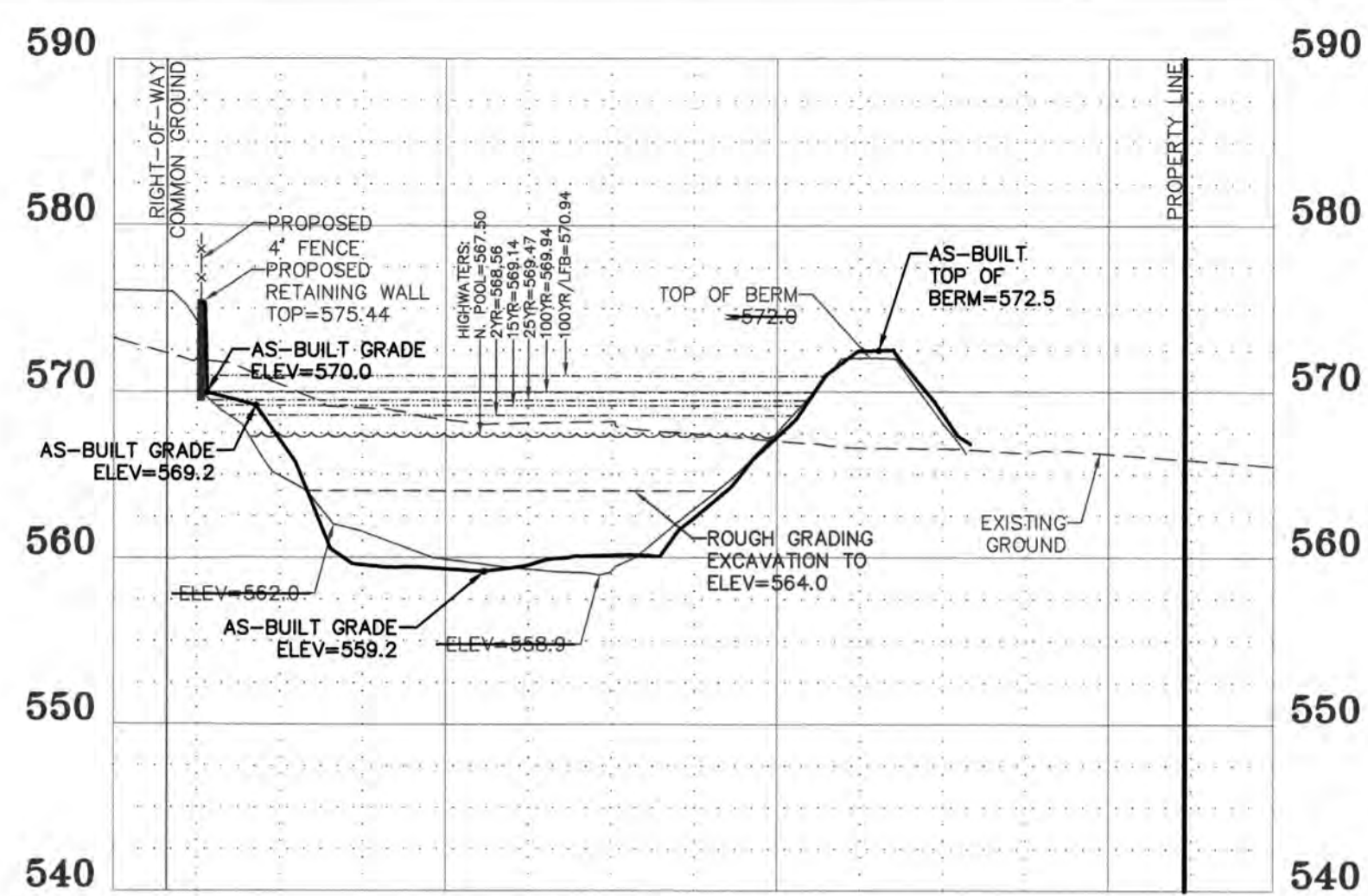
City No.
 #CITY

Page No.
 39A of 41

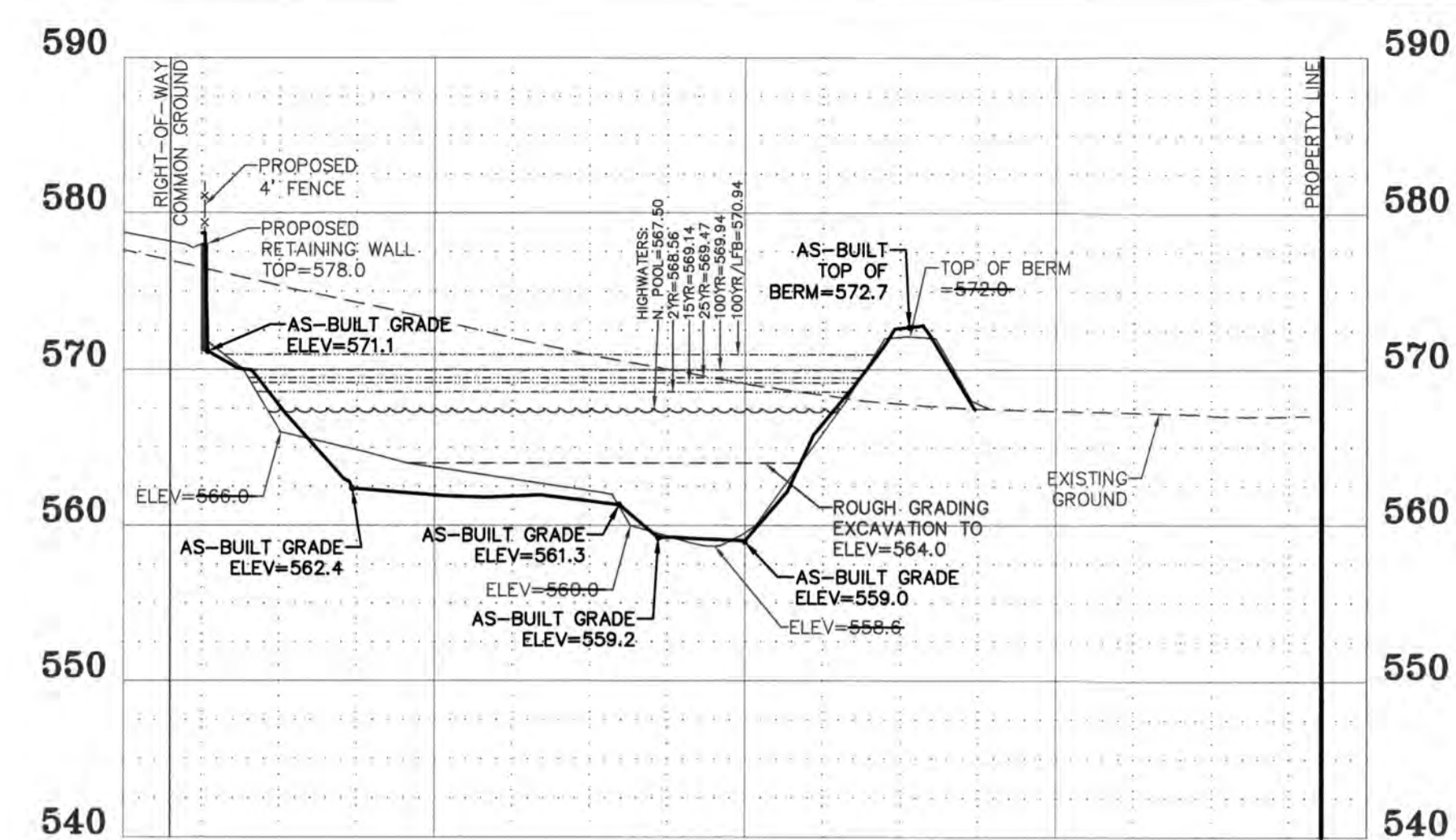
ENGINEERS SEAL DOES NOT APPLY TO DETAILS ON THIS SHEET.



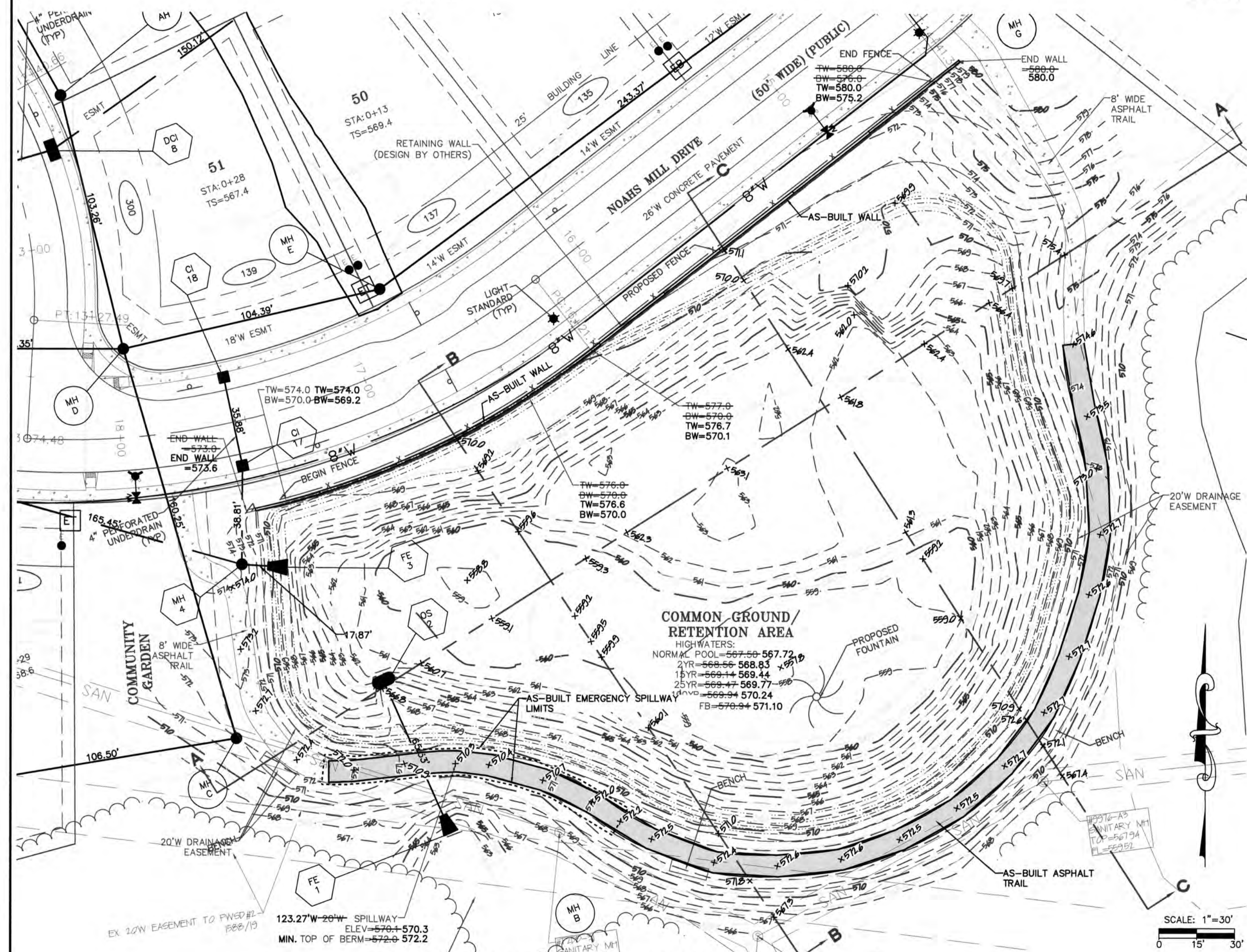
BASIN SECTION A-A
 SCALES:
 HORIZ. 1"=50'
 VERT. 1"=10'



BASIN SECTION B-B
 SCALES:
 HORIZ. 1"=50'
 VERT. 1"=10'



BASIN SECTION C-C
 SCALES:
 HORIZ. 1"=50'
 VERT. 1"=10'



RETENTION AREA DETAIL
 SCALE: 1" = 30'

AS-BUILT PUBLIC UTILITY FINAL MEASUREMENTS

THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

SIGNED: [Signature]
 P.E./L.S. [Signature]
 PROFESSIONAL LAND SURVEYOR
 STATE OF MISSOURI
 NUMBER: 2008000175
 EXPIRES: 12/31/2018

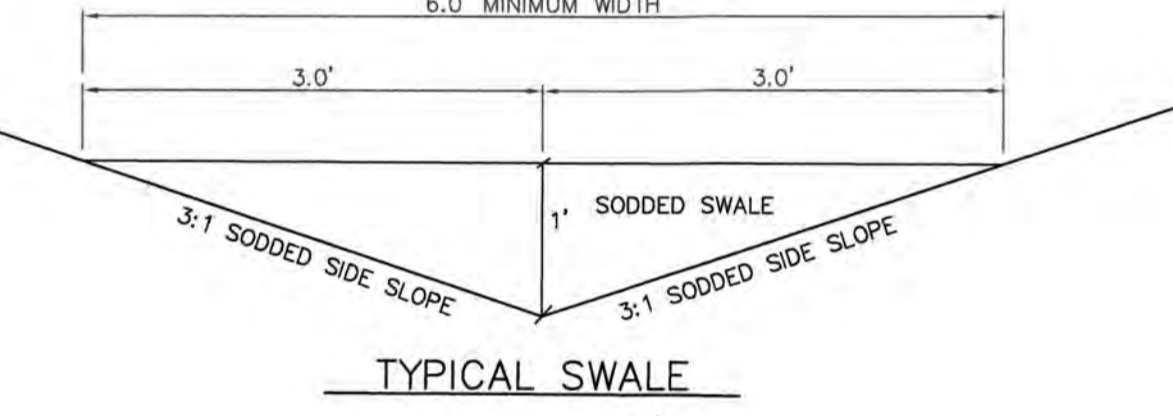
BAX PROJECT NAME: 12-15470B
 BAX PROJECT NO.: 12-15470B
 DESIGN DATE: 8/29/17
 DESIGNED BY: MDS

UPP STR	LOW STR	L	DIA	UPPER FL LN	LOWER FL LN	PS	UPPER ST EL	DEPTH HY GR	UPPER HY EL	LOWER HY EL	HYDR	FR	VEI	VEI	VEI	JUNC LOSS	PERN LOSS	CURVE LOSS	STR GRADE	INL CAP	DR AREA	PI	Q	TQ	PIPE CAP	LINE NUMBER	REMARKS
FE27	MH26	106	36	574.50	570.69	3.58	577.50	2.34	575.16*	573.69	0.00040	0.04	1.88	0.06	0.06	0.00	0.00	0.00	FE	0.00	0.00	0.00	13.31	13.31	126.27	1	
MH26	C17	68	36	570.49	569.85	0.94	580.50	7.20	573.25	573.25	.00040	0.03	1.88	0.06	0.02	0.00	0.00	0.00	MH	0.00	0.00	0.00	0.00	13.31	64.82	2	3.2 CFS BYPASS
C17	C16	84	48	569.65	569.24	0.49	578.13		573.25	573.24	.00010	0.01	1.19	0.02	0.00	0.04	0.00	0.00		1.64	0.00	0.00	4.84	14.95	100.66	3	
C16	C15	35	48	569.04	568.86	0.51	578.01	5.14	572.87	572.86	.00010	0.00	1.27	0.03	0.01	0.00	0.00	0.00		1.64	0.00	0.00	1.05	16.00	103.01	4	
C15	MH4	165	48	568.66	568.04	0.50	578.01	6.13	571.88	571.84	.00010	0.02	1.37	0.03	0.02	0.02	0.00	0.00		1.64	0.00	0.00	1.19	17.19	101.40	5	
MH4	FE3	18	36	567.64	567.50	0.79	575.26	6.54	568.72	568.72	.00010	0.00	1.37	0.03	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	127.29	6	HW=568.72	

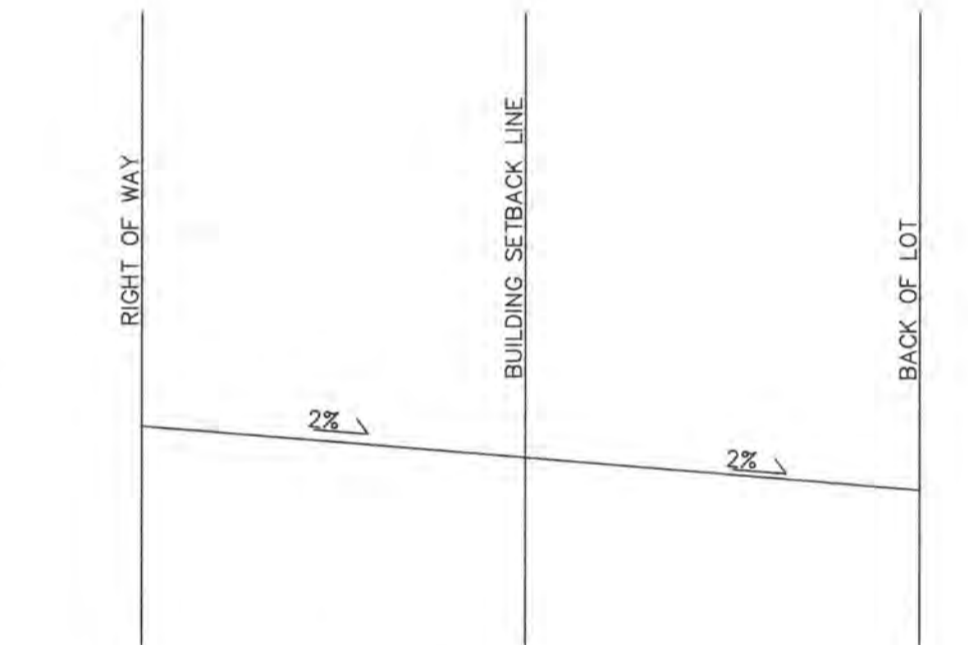
* INDICATES CRITICAL DEPTH

Maximum Discharge (Q) = 3.00 cfs
 Maximum Velocity (V) = 3.00 ft/s
 N = 0.030 (grass)
 Maximum side slopes = 3 (horizontal) : 1 (vertical)

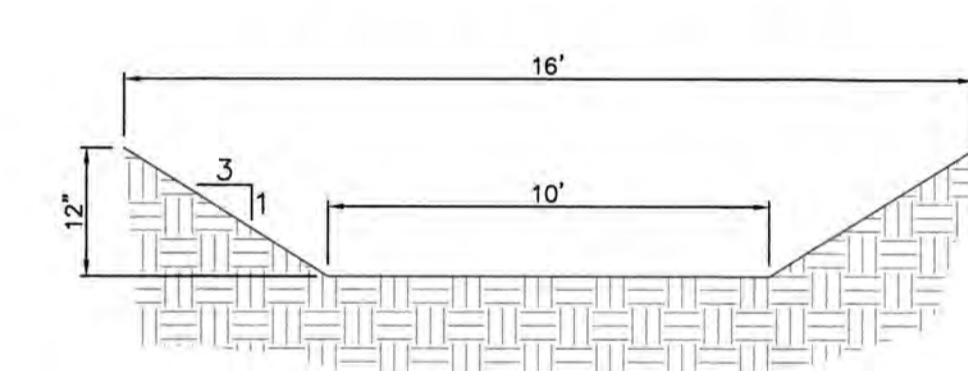
Slope	Discharge	Velocity	Depth
0.5%	3.00 cfs	1.73 ft/s	0.76 ft
1.0%	3.00 cfs	2.23 ft/s	0.67 ft
2.0%	3.00 cfs	2.87 ft/s	0.59 ft
3.0%	1.90 cfs	3.00 ft/s	0.46 ft
4.0%	1.30 cfs	3.00 ft/s	0.38 ft
5.0%	0.98 cfs	3.00 ft/s	0.33 ft
6.0%	0.71 cfs	3.00 ft/s	0.28 ft
7.0%	0.56 cfs	3.00 ft/s	0.25 ft
8.0%	0.48 cfs	3.00 ft/s	0.23 ft
9.0%	0.36 cfs	3.00 ft/s	0.20 ft
10.0%	0.33 cfs	3.00 ft/s	0.19 ft



TYPICAL SWALE
 2/3



TYPICAL EMERGENCY RELIEF SWALE PROFILE



TYPICAL EMERGENCY RELIEF SWALE

TYPICAL EMERGENCY RELIEF SWALE CALCS

Location	15 Yr/20 Min	Top of Foundation	Low Sill	Cross Section Location	Grade	Swale Width	Depth	High Water	Freeboard
Between Lots 24 & 25	11.09 cfs	589.80 ft	589.10 ft	Rear of House	587.50 ft	10.00 ft	0.51 ft	588.01 ft	1.09 ft
Between Lots 50 & 51	17.90 cfs	578.70 ft	578.00 ft	Building Line	576.20 ft	10.00 ft	0.71 ft	576.91 ft	1.09 ft
FE 27 behind lot 76	13.31 cfs*	582.90 ft	580.54 ft	Building Line	574.50 ft	3.00 ft	1.16 ft	575.66 ft	4.88 ft
Noahs Mill Drive Sta 17+50	53.83 cfs	NA	NA	Top Basin by Wall	572.00 ft	10.00 ft	0.54 ft	572.54 ft	NA
Between Lots 105 & 106	7.80 cfs	581.50 ft	574.00 ft	Rear of House	572.71 ft	10.00 ft	0.24 ft	572.95 ft	1.05 ft

TYPICAL EMERGENCY RELIEF SWALE CALCS

PROJECT TITLE:
 LEGENDS POINTE
 PHASE ONE
 AS-BUILT PLANS
 (formerly THE VILLAGES
 AT RHODES FARM)

ENGINEERING SURVEYING
 221 Point West Blvd.
 St. Charles, MO 63301
 636-928-5552
 FAX 928-1718



DISCLAIMER OF RESPONSIBILITY
 I hereby specify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

Box Engineering Company, Inc.
 Missouri State Certificate of Authority
 Engineering #000655
 Missouri State Certificate of Authority
 Surveying #00144

REVISIONS

DATE	REVISION
06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

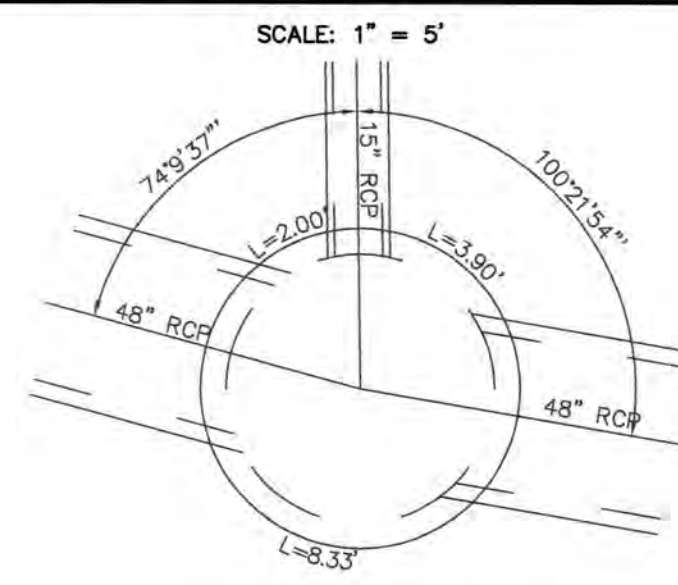
Developer / Owner:
 KAPB, L.L.C.
 410 CRESTVIEW DRIVE
 O'FALLON, MO 63366
 636-272-4200

CONSTRUCTION DETAILS

P+Z No.
 #27-15.05, 05/11/17

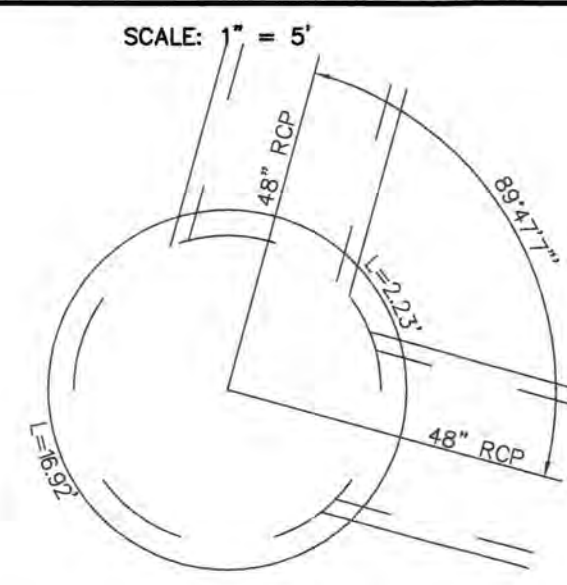
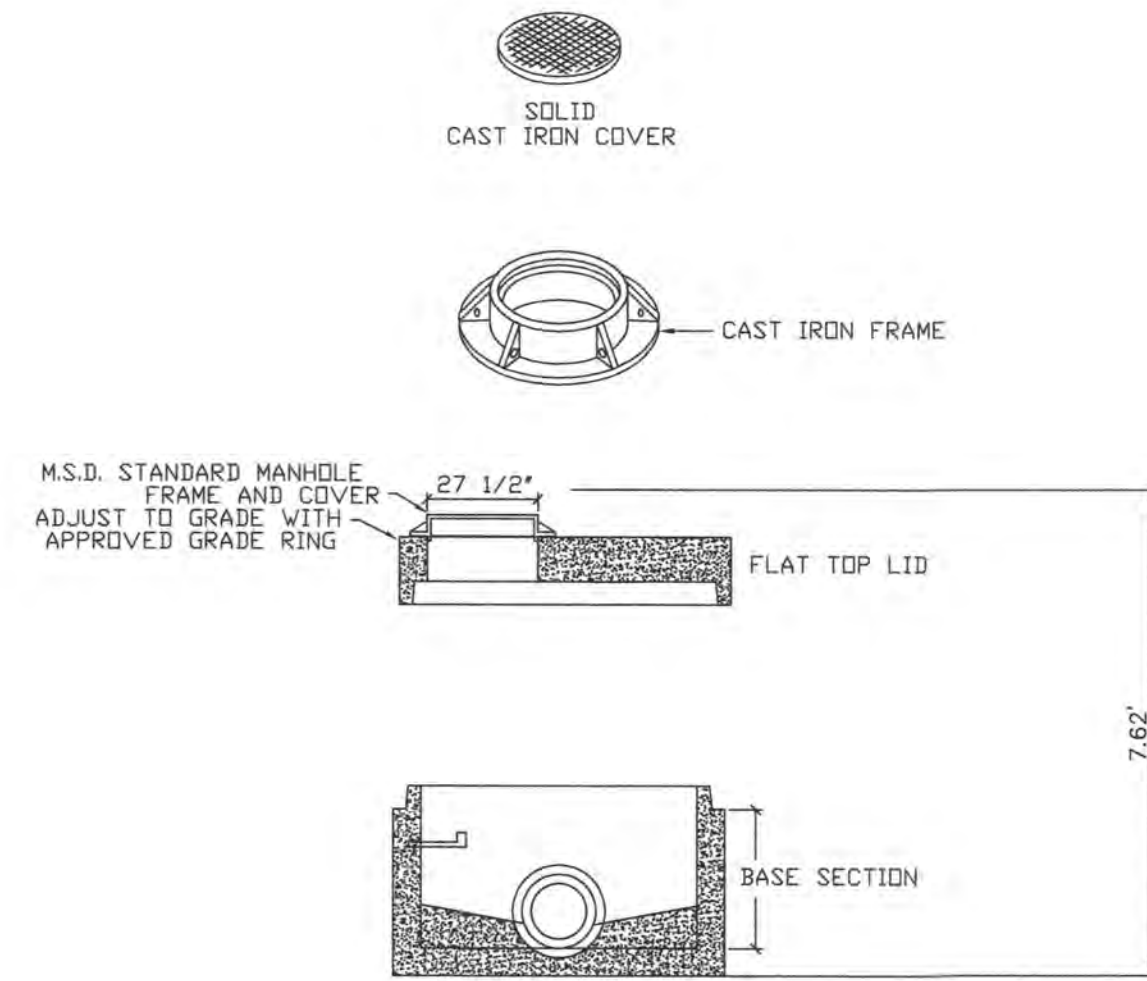
City No.
 #CITY

Page No.
 40 of 41



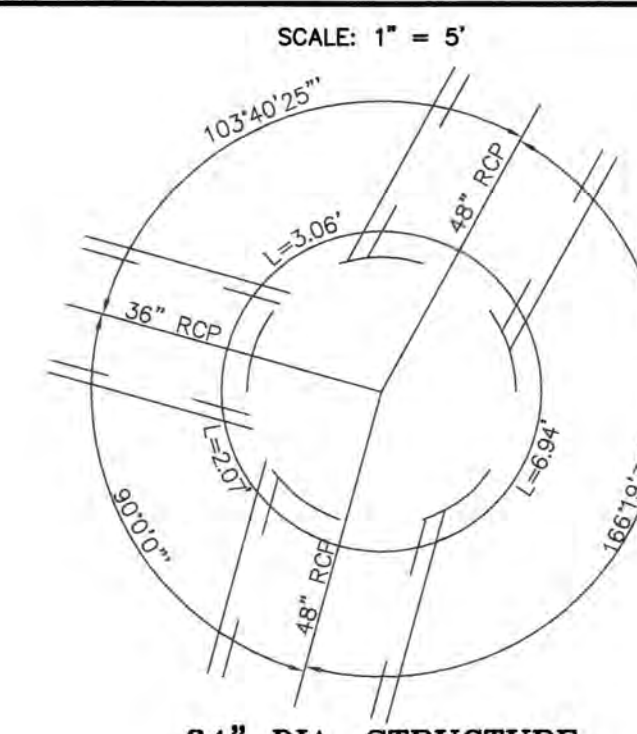
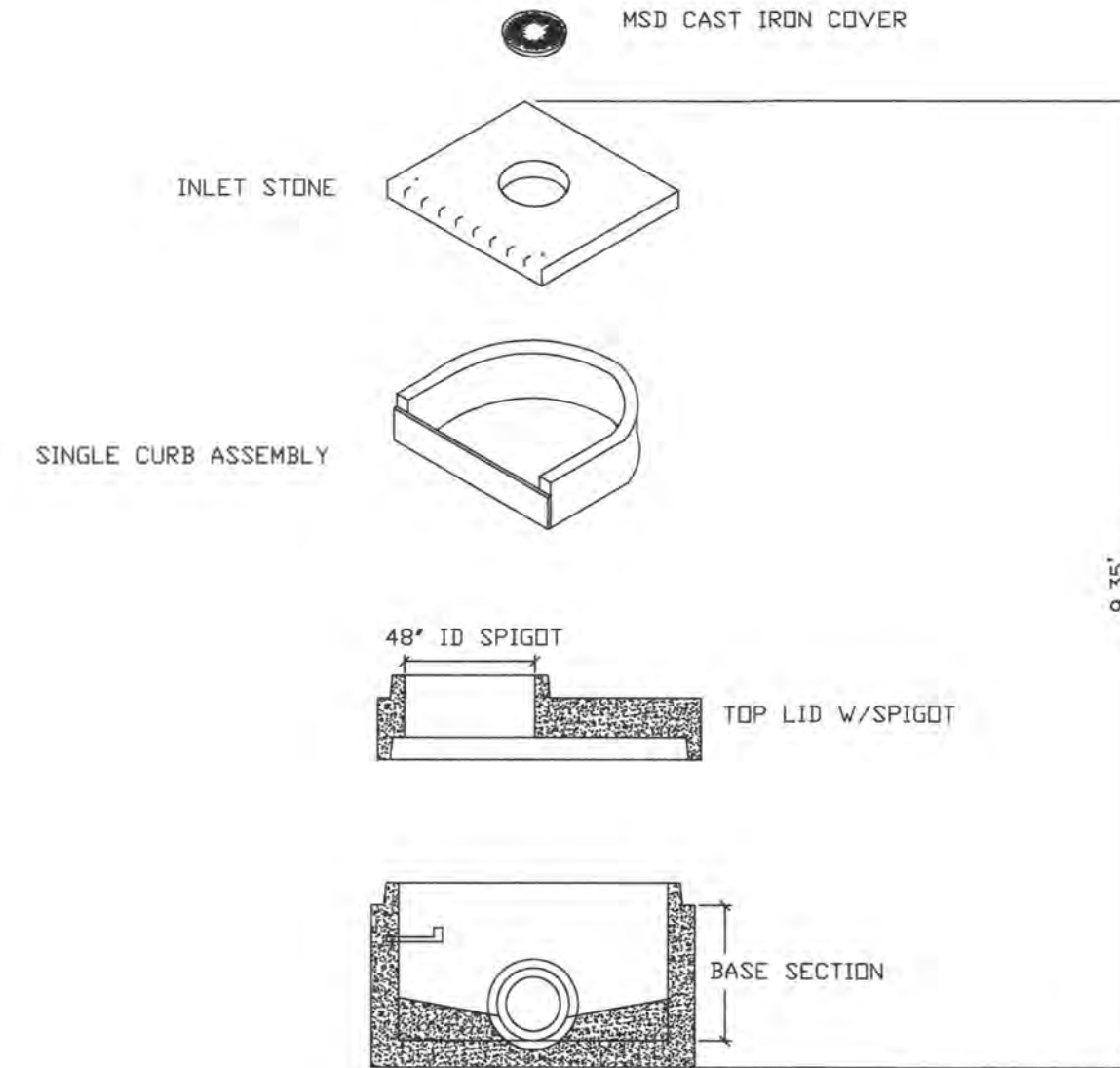
84" DIA. STRUCTURE

**MANHOLE #4
STRUCTURE DETAIL**



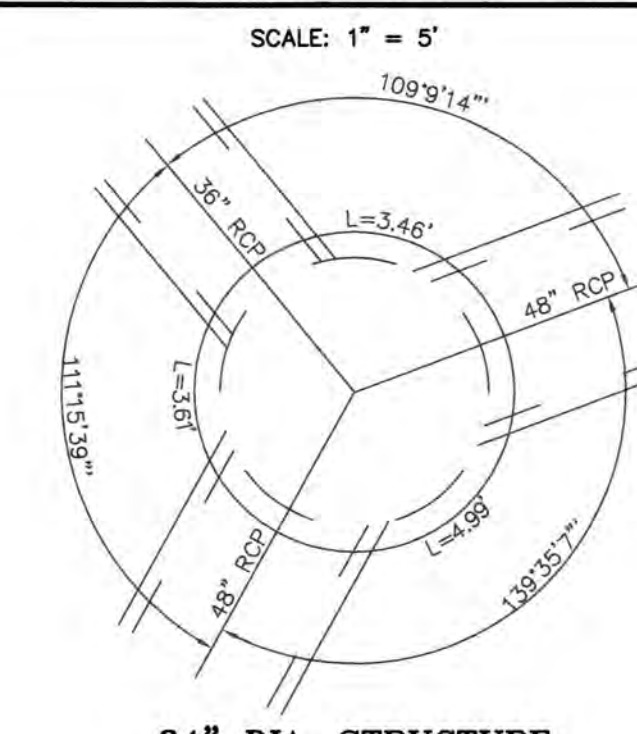
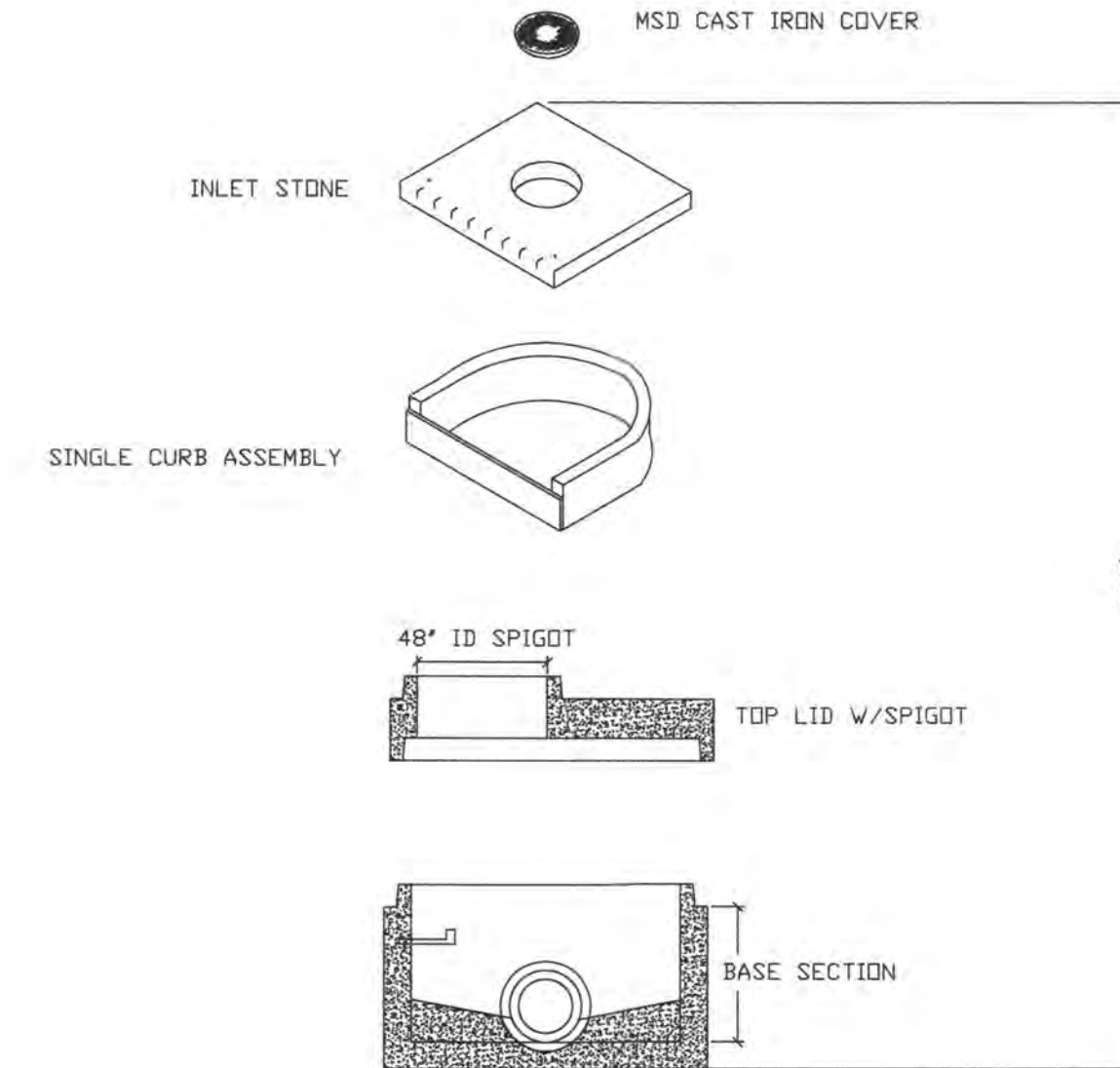
96" DIA. STRUCTURE

**CURB INLET #5
STRUCTURE DETAIL**



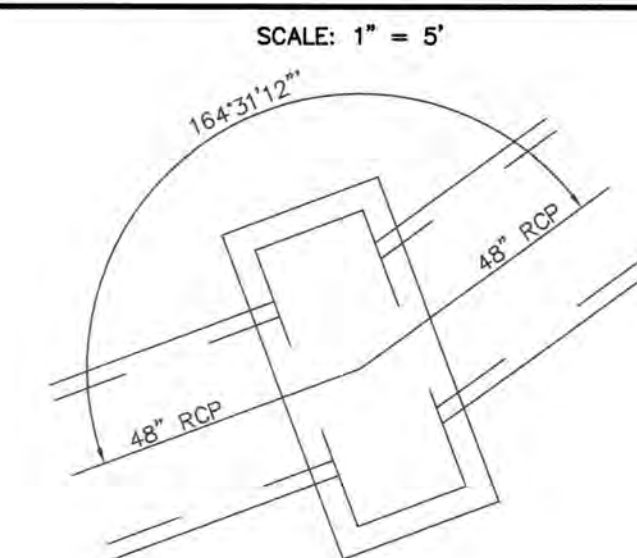
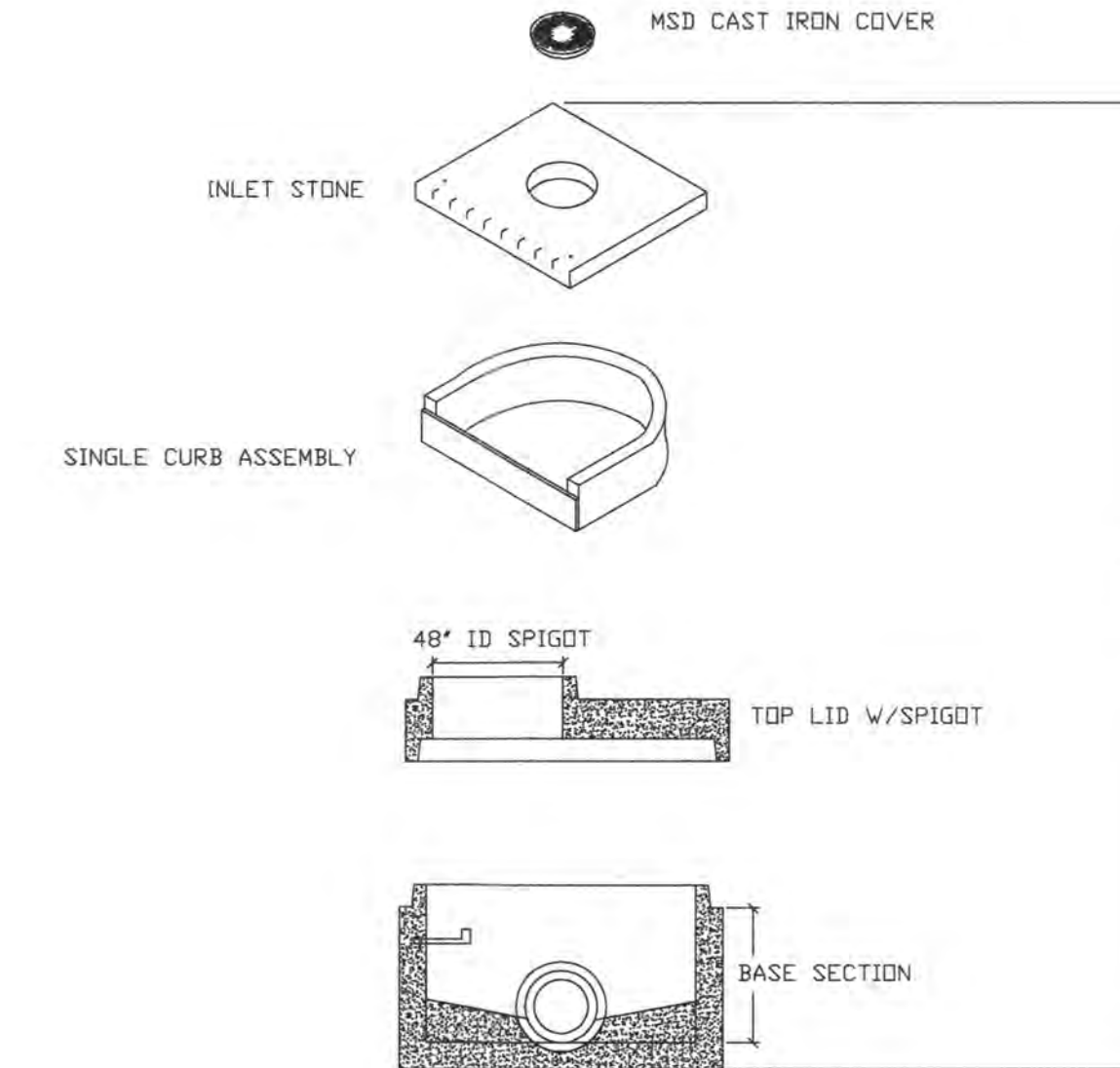
84" DIA. STRUCTURE

**CURB INLET #6
STRUCTURE DETAIL**



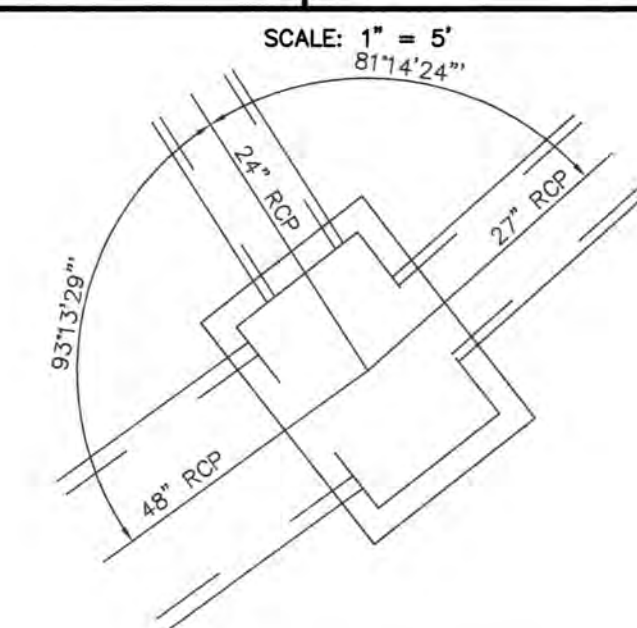
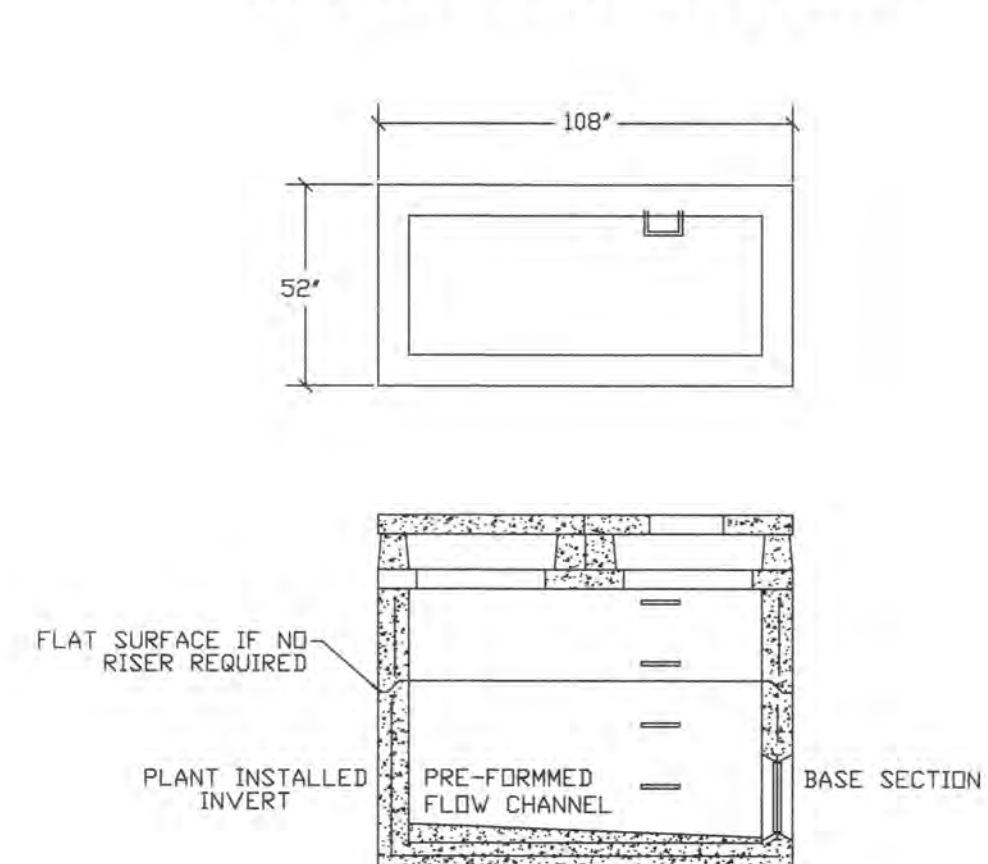
84" DIA. STRUCTURE

**CURB INLET #7
STRUCTURE DETAIL**



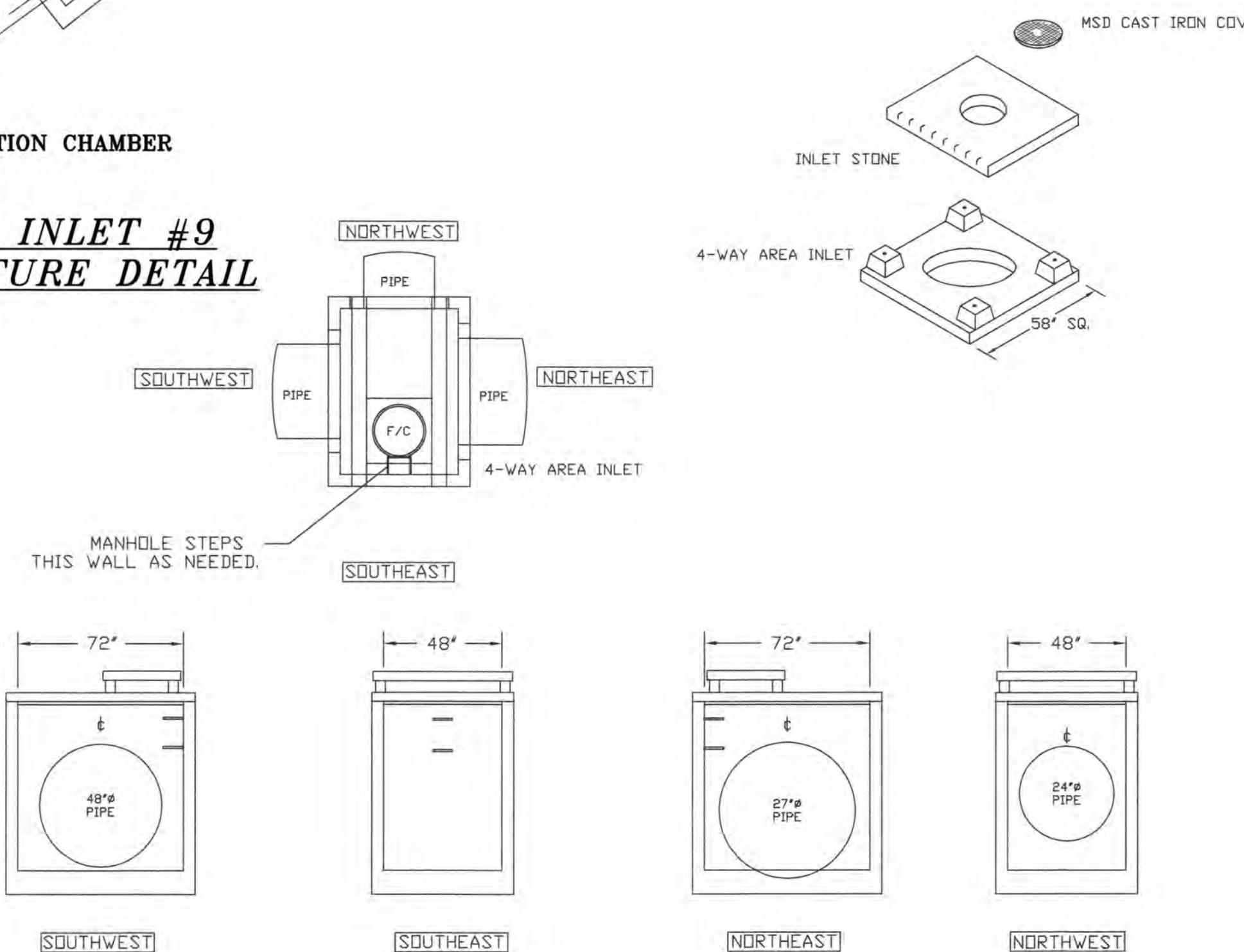
DOUBLE CURB INLET STRUCTURE

**DOUBLE CURB INLET #8
STRUCTURE DETAIL**



JUNCTION CHAMBER

**AREA INLET #9
STRUCTURE DETAIL**



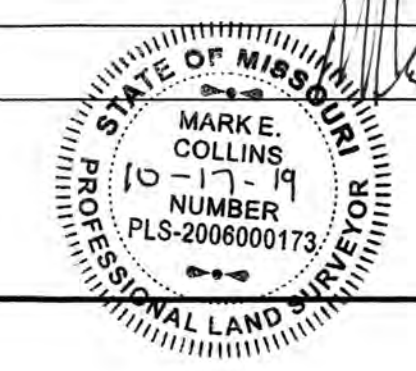
**AS-BUILT PUBLIC UTILITY
FINAL MEASUREMENTS**

THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS.

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

SIGNED: _____ DATE: _____
P.E./L.S.



PROJECT TITLE:
LEGENDS POINTE
PHASE ONE
AS-BUILT PLANS
(formerly THE VILLAGES
AT RHODES FARM)
Box Project # 12-154708 Issue Date: 01/17/2018

**ENGINEERING
PLANNING
SURVEYING**
221 Point West Blvd.
St. Charles, MO 63301
636-928-5552
FAX 636-928-1718

DISCLAIMER OF RESPONSIBILITY:
I hereby specify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

Box Engineering Company, Inc.
Missouri State Certificate of Authority
Engineering #000655
Missouri State Certificate of Authority
Surveying #000144

REVISIONS

DATE	REVISION
06/20/18	CITY COMMENT REVS.
08/03/18	CITY COMMENT REVS.
06/05/19	CITY COMMENT REVS.
08/06/19	CITY COMMENT REVS.
10/17/19	CITY COMMENT REVS.

Developer / Owner:
KAPB, L.L.C.
410 CRESTVIEW DRIVE
O'FALLON, MO 63366
636-272-4200

CONSTRUCTION DETAILS

P+Z No.
#27-15.05, 05/11/17

City No.
#CITY